JVC

SERVICE MANUAL

LCD FLAT TELEVISION

LT-26WX84/K



BASIC CHASSIS
SB5



TABLE OF CONTENTS

1	PRECAUTION	. 1-3
2	SPECIFIC SERVICE INSTRUCTIONS	. 1-6
3	DISASSEMBLY	1-12
4	ADJUSTMENT	1-22
5	TROUBLESHOOTING	1-54

SPECIFICATION

Items		Contents			
Dimensions ($W \times H \times D$)		70.3cm × 56.0cm × 26.0cm (Included stand)			
		70.3 cm \times 49.1 cm \times 9.4 cm (TV only)			
Mass		22.0kg (Included stand)			
		19.2kg (TV only)			
Power Input		AC220V, 60Hz			
Power Consumption		155W (Max)			
TV RF System		CCIR (M)			
Color System		NTSC			
Sound System		BTSC (Multi Channel Sound)			
Teletext System		Closed caption			
and Frequency VHF High UHF CATV		02ch~06ch: 54MHz~88MHz 07ch~13ch: 174MHz~216MHz 14ch~69ch: 470MHz~806MHz 54MHz~804MHz Low Band: 02~06, A-8 by 02~06&01 High Band: 07~13 by 07~13 Mid Band: A~I by 14~22 Super Band: J~W by 23~36 Hyper Band: W+1~W+28 by 37~64 Ultra Band: W+29~W+84 by 65~94, 100~125			
TV / CATV Total Channel		Sub Mid Band : A4~A1 by 96~99 180 Channels			
Intermediate Frequency	Vidoo IE	45.75 MHz			
' '		43.73 MHZ 41.25 MHz (4.5MHz)			
Color Sub Carrier		3.58 MHz			
LCD panel		26-inch wide aspect (15:9)			
Screen Size		Diagonal : 66cm (H:33.9cm × V : 56.6cm)			
Display Pixels		Horizontal : 1280 dots × Vertical : 768 dots (W-XGA)			
Audio Power Output		10W + 10W			
Speaker		6.6cm, round type × 2 (Oblique corn)			
Antenna terminal (VHF/UHF)		F-type connector, 75Ω unbalanced, coaxial			
Video / Audio input	Component Video				
Input-1/2/3	525p / 525i S-Video [Input-1/2] Video	Y: 1V (p-p) (Sync signal: $0.35V(p-p)$, 3-value sync.), $75~\Omega$ Pb/Pr: $\pm 0.35V(p-p)$, $75~\Omega$ Y: 1V (p-p), Positive (Negative sync provided), $75~\Omega$ Pb/Pr: $0.7V(p-p)$, $75~\Omega$ Mini-DIN 4 pin \times 2 Y: 1V (p-p), Positive (Negative sync provided), $75~\Omega$ C: $0.286V$ (p-p) (Burst signal), $75~\Omega$ 1V (p-p), Positive (Negative sync provided), $75~\Omega$, RCA pin jack \times 3 500mV (rms), High impedance, RCA pin jack \times 6 RCA pin jack \times 3			
Digital-in		DVI-D 24-pin connector \times 1 (Digital-input terminal is not compatible with computer signal) 500mV (rms), Low impedance, RCA pin jack \times 2			
Monitor output S-Video Video		Mini-DIN 4 pin \times 1 Y: 1V (p-p), Positive (Negative sync provided), 75 Ω C: 0.286V (p-p) (Burst signal), 75 Ω 1V (p-p), Positive (Negative sync provided), 75 Ω RCA pin jack \times 1 500mV (rms), Low impedance, RCA pin jack \times 2			
Headphone		3.5mm stereo mini jack × 1			
Remote Control Unit		RM-C13G (AA/R6/UM-3 battery × 2)			

Design & specifications are subject to change without notice.

SECTION 1 PRECAUTION

1.1 SAFETY PRECAUTIONS

- (1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.

Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (\perp) side GND, the ISOLATED (NEUTRAL) : ($\stackrel{\bot}{=}$) side GND and EARTH : ($\stackrel{\textcircled{}}{=}$) side GND.

Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.

- (5) If any repair has been made to the chassis, it is recommended that the PDP voltage setting should be checked or adjusted.
- (6) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(7) Isolation Check (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.) This method of test requires a test equipment not generally found in the service trade.

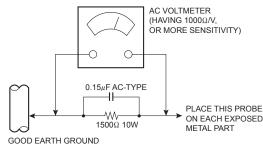
b) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000Ω per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a $0.15\mu F$ AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

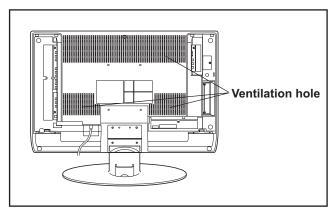
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



1.2 INSTALLATION

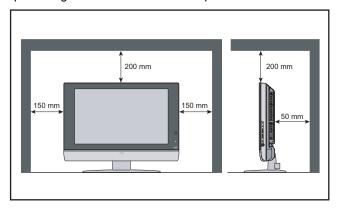
1.2.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the pre-determined level and power will be turned off automatically. Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.



1.2.2 INSTALLATION REQUIREMENTS

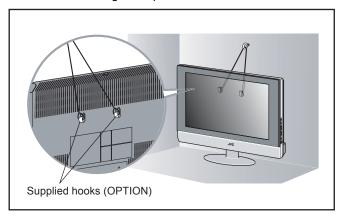
Ensure that the minimal distance is maintained, as specified below, between the unit with and the surrounding walls, as well as the floor etc. Install the unit on stable flooring or stands. Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.



1.2.3 INSTALLATION REQUIREMENTS

To ensure safety in an emergency such as an earthquake, and to prevent accidents, ensure that measures are taken to prevent the TV dropping or falling over.

Use the supplied screws to firmly attach the supplied hooks (OPTION) to the back of the TV, and use commercially available cord to fix the TV to rigid components such as walls and columns.



1.2.4 NOTES ON HANDLING

- (1) WHEN TAKING UNIT OUT OF A PACKING CASE
 - When taking the unit out of a packing case, do not grasp the upper part of the unit. If you take the unit out while grasping the upper part, the LCD PANEL may be damaged because of a pressure. Instead of grasping the upper part, put your hands on the lower backside or sides of the unit.
- (2) AS FOR PRESSING OR TOUCHING A SPEAKER Be careful not to press the opening of the speaker in the lower part of the unit and around them since the decorative sheet on the surface of the openings may be deformed.

1.3 HANDLING LCD PANEL

1.3.1 PRECAUTIONS FOR TRANSPORTATION

When transporting the unit, pressure exerted on the internal LCD panel due to improper handling (such as tossing and dropping) may cause damages even when the unit is carefully packed. To prevent accidents from occurring during transportation, pay careful attention before delivery, such as through explaining the handling instructions to transporters.

Ensure that the following requirements are met during transportation, as the LCD panel of this unit is made of glass and therefore fragile:

- (1) USE A SPECIAL PACKING CASE FOR THE LCD PANEL When transporting the LCD panel of the unit, use a special packing case (packing materials). A special packing case is used when a LCD panel is supplied as a service spare part.
- (2) ATTACH PROTECTION SHEET TO THE FRONT Since the front (display part) of the panel is vulnerable, attach the protection sheet to the front of the LCD panel before transportation. Protection sheet is used when a LCD panel is supplied as a service spare part.
- (3) AVOID VIBRATIONS AND IMPACTS

 The unit may be broken if it is toppled sideways even when properly packed. Continuous vibration may shift the gap of the panel, and the unit may not be able to display images properly. Ensure that the unit is carried by at least 2 persons and pay careful attention not to exert any vibration or impact on it.
- (4) DO NOT PLACE EQUIPMENT HORIZONTALLY Ensure that it is placed upright and not horizontally during transportation and storage as the LCD panel is very vulnerable to lateral impacts and may break. During transportation, ensure that the unit is loaded along the traveling direction of the vehicle, and avoid stacking them on one another. For storage, ensure that they are stacked in 2 layers or less even when placed upright.

1.3.2 OPTICAL FILTER (ON THE FRONT OF THE LCD PANEL)

- (1) Avoid placing the unit under direct sunlight over a prolonged period of time. This may cause the optical filter to deteriorate in quality and color.
- (2) Clean the filter surface by wiping it softly and lightly with a soft and lightly fuzz cloth (such as outing flannel).
- (3) Do not use solvents such as benzene or thinner to wipe the filter surface. This may cause the filter to deteriorate in quality or the coating on the surface to come off. When cleaning the filter, usually use the neutral detergent diluted with water. When cleaning the dirty filter, use water-diluted ethanol
- (4) Since the filter surface is fragile, do not scratch or hit it with hard materials. Be careful enough not to touch the front surface, especially when taking the unit out of the packing case or during transportation.

1.3.3 PRECAUTIONS FOR REPLACEMENT OF EXTERIOR PARTS

Take note of the following when replacing exterior parts (REAR COVER, FRONT PANEL, etc.):

- (1) Do not exert pressure on the front of the LCD panel (filter surface). It may cause irregular color.
- (2) Pay careful attention not to scratch or stain the front of the LCD panel (filter surface) with hands.
- (3) When replacing exterior parts, the front (LCD panel) should be placed facing downward. Place a mat, etc. underneath to avoid causing scratches to the front (filter surface).

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

- · New chassis design enable use of an interactive on screen control.
- MOTION COMPENSATION: With this function, the seamless reproduction of dynamic motion on the screen has been realized.
- · Bullet-in 3 dimension Y/C separate circuit.
- Receive DTV broadcast (1125i / 750p / 525p / 525i)
- Built-in HDCP / Component (Y / Pb / Pr) input.
- · Built-in Hyper Sound, BBE circuit.
- DIST is a digital high-definition image processing technology that converts various image input signals such as NTSC(480i), 480p, 720p, and 1080i into a format with the best resolution for a display device such as a plasma display panel, and displays high-definition images.

2.2 TECHNICAL INFORMATION

2.2.1 LCD PANEL

This unit uses the flat type panel LCD (Liquid Crystal Display) panel that occupies as little space as possible, instead of the conventional CRT (Cathode Ray Tube), as a display unit.

2.2.1.1 STRUCTURE

The LCD panel of the unit is constructed with the metal chassis that surrounds the panel unit and supports the LCD panel part and the backlight part to protect them.

The color filter glass and the TFT glass (thin film transistor) are inserted between the front polarizing filter and the rear polarizing filter. Liquid crystals are inserted between the color filter glass and the TFT glass. Since the gap between the two glasses is only a few μm , a spacer (bead) is inserted in the gap to retain the gap.

The backlight unit is placed behind the LCD panel. Since liquid crystals themselves do not emit light, the backlight as an external light source emits light to the LCD panel from behind through the diffuser.

Circuit boards for controlling the LCD panel and the backlight are attached around the back part of the LCD panel unit.

Since the unit has the two polarizing filter that are at right angles to each other, the unit adopts "normally black" mode, where light does not pass through the polarizing filter and the screen is black when no voltage is applied to the liquid crystals.

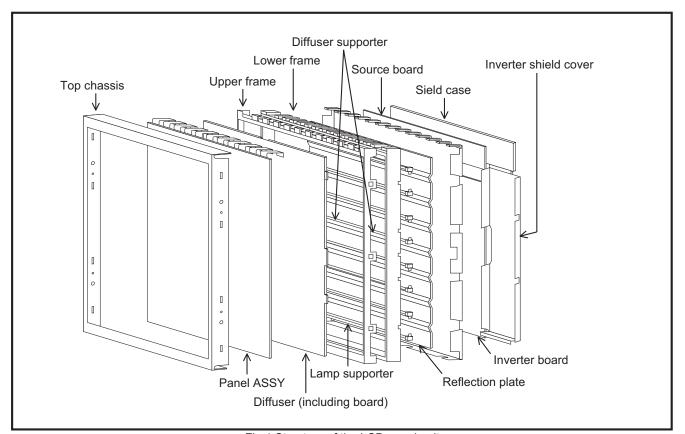


Fig.1 Structure of the LCD panel unit

2.2.1.2 SPECIFICATIONS

The following table shows the specifications of this unit.

Item	Specifications	Remarks
Maximum dimensions ($W \times H \times D$)	62.7cm × 38.9cm × 4.9cm	
Weight	8.0kg	
Effective screen size	Diagonal : 66cm (H:33.9cm × V : 56.6cm)	26V type
Aspect ratio	15:9	
Drive device/ system	a-Si-TFT, active matrix system	
Resolution	Horizontally 1280 × Vertically 768 × RGB <w-xga></w-xga>	2949120 dots in total
Pixel pitch (pixel size)	Horizontally:0.4425mm, Vertically:0.4425mm	
Displayed color	16777216 colors	256 colors for R, G, and B
Brightness	450cd/m ²	500cd/m ² at maximum
Contrast ratio	500:1	
Response time	16.7ms	
View angle	Vertically 170°, horizontally 170°	

2.2.1.3 PIXEL FAULT

There are three pixel faults - bright fault, dark fault and flicker fault - that are respectively defined as follows.

(1) BRIGHT FAULT

In this pixel fault, a cell that should not light originally is lighting on and off.

For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting on and off.

(2) DARK FAULT

In this pixel fault, a cell that should light originally is not lighting or lighting with the brightness twice as brighter as originally lighting. For checking this pixel fault, input 100% of each R/G/B colour and find out the cell that is not lighting.

(3) FLICKER FAULT

In the pixel fault, a cell that should light originally or not light originally is flashing on and off.

For checking this pixel fault, input ALL BLACK SCREEN signal or 100% of each RGB colour and find out the cell that is flashing on and off.

2.2.2 MAIN MICRO COMPUTER (CPU) FUNCTION

Pin No.	Pin name	I/O	Function
1	BS_RXD	0	Not used
2	MICON_V	I	Vertical sync for OSD / CLOSED CAPTION
3	LB_PRO	I	Low B protection detect [Detection : H]
4	NC		Not used
5	/RST	I	Reset [Reset : L]
6	HDMI_INT	I	Not used
7	/TEST	I	3.3V
8	OSD_YS	0	YS for OSD / CLOSED CAPTION
9	(DPCRST)	0	Not used
10	BS/DIN	0	Not used
11	(A_MU)(LED_5)	0	Not used
12	MICON_H	I	Horizontal sync for OSD / CLOSED CAPTION
13	(A_MU)(LED_4)	0	Not used
14	P46,OSDXI		Not used
15	P45,OSDXO		Not used
16	(SDA2)	I/O	Not used
17	AC_IN	Ţ	AC power (60Hz) for time clock
18	(SCL2)	0	Not used
19	(TU_POW)	0	Not used
20	VCOI	I	LPF input
21	PDO	0	LPF output
22	/IP_RESET	0	Reset (L) [Reset : L]
23	OSD_YM	0	YM for OSD / CLOSED CAPTION
24	OSD_B	0	B signal output for OSD / CLOSED CAPTION
25	POW_LED	0	Lighting for power [Lighting : H]
26	OSD_G	0	G for OSD / CLOSED CAPTION
27	OSD_R	0	R for OSD / CLOSED CAPTION
28	VRE	I	Reference voltage
29	IP_ERR	I	AMDP program load
30	IREF	I	Reference current
31	COMP	I	Reference conpare
32	AVDD	ı	3.3V
33	CLL	0	Not used
34	VREFLS	I	Reference voltage (For SUB CCD)
35	SUB_CCD	I	Not used
36	NC		Not used
37	VSS	I	GND
38	MAIN_CCD	ı	Not used
39	VREFHS	I	Standard voltage (For Main CCD)
40	CLH	I	Not used
41	VDD/VPP	I	3.3V
42	CLKSW1	0	IP clock switch [ON : L]
43	CLKSW2	0	IP clock switch [ON : L]
44	ON_TIM	0	Not used
45	SBO01	0	Port for writing on board

Pin No.	Pin name	I/O	Function
46	SBD01	I	Port for writing on board / Communication (XTD) for SUB CPU
47	SBT1	I	Port for writing on board / Communication (RTD) for SUB CPU
48	HP_VOL	0	Headpone volume control (0V-3.3V)
49	/BS_RESET	0	Not used
50	HDMI_ASW	0	Not used
51	BS1.5CTL	0	Not used
52	ODU_OUT	0	Not used
53	15/11_SW	0	Not used
54	ODU_PRO	0	Not used
55	BS_POW		Not used
56	BS3.3CTL	0	Not used
57	AFT2	I	Not used
58	/LOB_POW	0	Low B power control [Detection : H]
59	COMPULING	I	Not used
60	/POWERGOOD	I	Power condition check [ON : L]
61	MECHA_SW	I	Mechanical (POWER) swtich detection [Pussing : L]
62	/MAIN_POW	0	Main power control [ON : L]
63	NC		Not used
64	(B1_POW)	0	Not used
65	AFT1		Not used
66	(X_RAY)	I	GND
67	(EE_CDS)	I	GND
68	KEY2	I	Key scan data [ON : H]
69	KEY1	I	Key scan data [ON : H]
70	SCL1	0	I ² C bus clock (For Main memory)
71	SDA1	I/O	I ² C bus data (For Main memory)
72	REMO	I	Remote control data
73	(AP_REQ)(LED_2)	0	Not used
74	VSS	I	GND
75	OSC2	0	4MHz oscillation for system clock
76	OSC1	I	4MHz oscillation for system clock
77	VDD	I	3.3V
78	SCL0	0	I ² C bus clock (For general)
79	(AP_CLK)(LED_1)	0	Not used
80	SDA0	I/O	I ² C bus data (For general)
81	BSLK(D_CLOCK)	0	Not used
82	BS_TXD(D_DATA)	I	Not used
83	NC		Not used
84	P_MU	0	Picture muting [Muting : H]

2.2.3 SUB MICRO COMPUTER (CPU) FUNCTION

Pin No.	Pin name	I/O	Function
1	(SYSTEM0)	I	GND
2	(SYSTEM3)	I	GND
3	AVCC	-	5V
4	X2	-	Not used
5	X1	-	Not used
6	VCL	-	Internal down voltage
7	RES	I	Reset [Reset : L]
8	TEST	I	Operation test for SUB CPU
9	VSS	-	GND
10	OSC2	0	10MHz oscillation for system clock
11	OSC1	I	10MHz oscillation for system clock
12	VCC	-	5V
13	NC	0	Not used
14	NC	0	Not used
15	BL_D2	0	Back light 20ms delay for LCD panel [On:L]
16	BL_D1	0	Back light 10ms delay for LCD panel [On:L]
17	I2C_STOP	0	Not used
18	BL_ON	0	Back light reset for LCD panel [Reset:L]
19	NC	0	Not used
20	NC	0	Not used
21	NC	0	Not used
22	NC	0	Not used
23	SDA1	I/O	I ² C bus data (For Sub memory)
24	A.DIM	0	Not used
25	SCL1	0	I ² C bus clock (For Sub memory)
26	SDA0	I/O	I ² C bus data (For general)
27	SCL0	0	I ² C bus clock (For general)
28	NC	0	Not used
29	NC	0	Not used
30	NC	0	Not used
31	NC	0	Not used
32	NC	0	Not used
33	NC	0	Not used
34	NC	0	Not used
35	NMI	I	Port for writing on board [Writning:L]
36	NC	0	Not used
37	(HD)	I	Not used
38	NC	0	Not used
39	(REMO)	I	Not used
40	NC	0	Not used
41	P85	-/I	Not used
42	P86	-	Not used
43	P87	-	Not used
44	SCK3	0	Port for writing on board
45	RXD	I	Port for writing on board

Pin No.	Pin name	I/O	Function
46	TXD	0	Port for writing on board
47	(PROTECTOR0)	I	Not used
48	NC	0	Not used
49	RXD2	I	Port for communication (Main cpu)
50	TXD2	0	Port for communication (Main cpu)
51	NC	0	Not used
52	(ACTIVE)	I	Not used
53	VD	I	Vertical sync
54	(REC_DET)	I	Not used
55	(PSS)	I	Not used
56	(ALARM)	I	Not used
57	(SYSTEM2)	I	Not used
58	(SYSTEM1)	I	Not used
59	(PROTECTOR1)	I	Not used
60	(AMP_PRO2)	I	Not used
61	(AMP_PRO1)	I	Not used
62	EE_CDS	I	Not used
63	(KEY_IN1)	I	Not used
64	(KEY_IN2)	I	Not used

SECTION 3 DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

NOTE:

Since this model adopts a layer structure, follow the procedure below in disassembling this model.

Be careful enough not to damage or scratch parts.

3.1.1 REMOVING THE STAND

- (1) Remove the 2 screws [A], and remove the STAND COVER.
- (2) Remove the 4 screws [B], and remove the STAND.

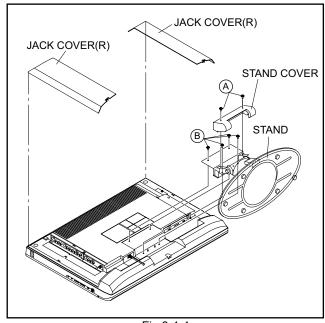


Fig.3-1-1

3.1.2 REMOVING THE REAR COVER

- · Remove the STAND.
 - (1) Remove the JACK COVER (R).
 - (2) Remove the JACK COVER (L).
 - (3) Remove the 7 screws [C], 3 screws [D], and 4 screws [E] (14 screws in total).
 - (4) Remove the REAR COVER.

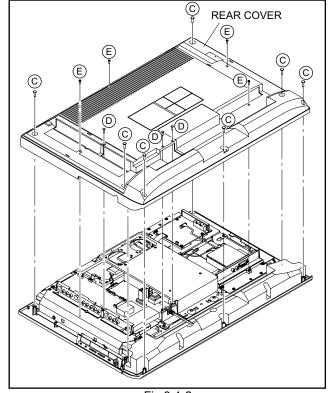


Fig.3-1-2

3.1.3 REMOVING THE FAN BRACKET / REGULATOR PWB / POWER CORD

- · Remove the STAND.
- · Remove the REAR COVER.
 - Pull out the wire of COOLING FAN (the connector [Y] of the POWER PWB).
 - (2) Remove the 5 screws [F], and remove the FAN BRACKET.
 - (3) Remove the REGULATOR PWB.
 - (4) Pull out the POWER CORD.
 - (5) Remove 1 screw [G], and remove the POWER CORD HOLDER.

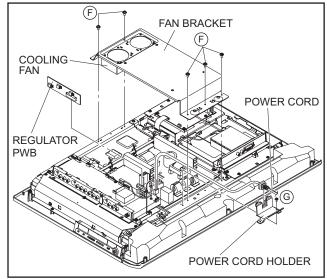


Fig.3-1-3

3.1.4 REMOVING THE RECEIVER PWB

- · Remove the STAND.
- · Remove the REAR COVER.
 - (1) Remove the 3 screws [H] and 3 screws [J] (6 screws in total). Then, remove the TERMINAL BASE.
 - (2) Remove the 6 screws [K], and remove the RECEIVER PWB.

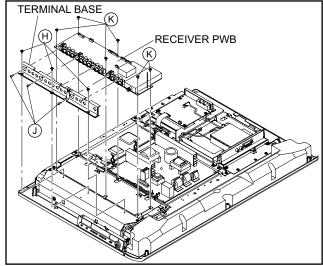


Fig.3-1-4

3.1.5 REMOVING THE FRONT CONTROL PWB CONTROL / FRONT SENSOR PWB

- · Remove the STAND.
- · Remove the REAR COVER.
 - (1) Remove the 2 screws [L], and remove the CONTROL KNOB.
 - (2) Remove the 3 screws [M], and remove the FRONT CONTROL PWB.
 - (3) Remove the FRONT SENSOR PWB.

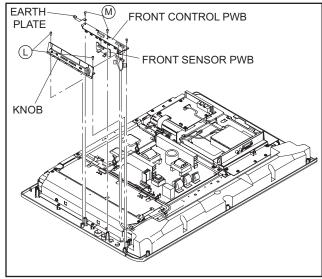


Fig.3-1-5

3.1.6 REMOVING THE VIDEO PWB / DIGITAL INPUT MODULE PWB

- · Remove the STAND.
- · Remove the REAR COVER.
 - (1) Remove the 1 screw [N] and 1 screw [P]. Then, remove the JACK BASE.
 - (2) Remove the 4 screws [Q], and remove the VIDEO PWB.
 - (3) Remove the 2 screws [R], and remove the DIGITAL INPUT MODULE BASE.
 - (4) Remove the 4 screws [S], and remove the DIGITAL INPUT MODULE PWB.

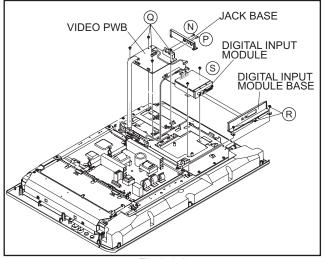


Fig.3-1-6

DIGITAL INPUT MODULE Prior to disassembly outlet without fail. (Tous the SB connector short is inserted into the connector short in carry the inactivation of the connector short in the short included in in the short inc

- Prior to disassembly, unplug the power code from the AC outlet without fail. (Turn the power "off".)
- Short the SB connector [1] pin and [2] pin of the DIGITAL INPUT MODULE. (At the time of assembling)
- Before the rear panel is inserted into the cabinet, release the short-circuit between the SB connector [1] pin and [2] pin of the DIGITAL INPUT MODULE.
- After releasing the short-circuit between the SB connectors, do not turn the power on until the rear panel is inserted into the cabinet.
- * Negligence in carrying out the above steps may cause the inactivation of the TV.

3.1.7 REMOVING THE MI-COM & DIST MODULE PWB

- · Remove the STAND.
- · Remove the REAR COVER.
- DIGITAL INPUT MODULE PWB
 - (1) Remove the 7 screws [T], and remove the VIDEO PWB BRACKET.
 - (2) Remove the 4 screws [U], and remove the MI-COM & DIST MODULE PWB from the VIDEO PWB BRACKET.

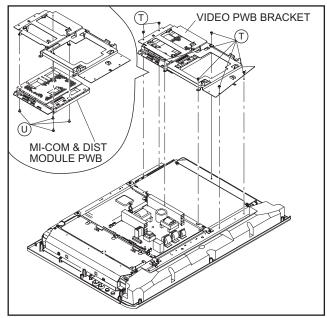


Fig.3-1-7

3.1.8 REMOVING THE POWER PWB

- Remove the STAND.
- Remove the REAR COVER.
- · Remove the FAN BRACKET.
- · Remove the POWER CORD.
- · Remove the RECEIVER PWB.
 - (1) Remove the 4 screws [X], and remove the AV JACK BRACKET.
 - (2) Remove the 6 screws [Y], and remove the POWER PWB.
 - (3) Remove the 6 screws [Z], and remove the CHASSIS BASE

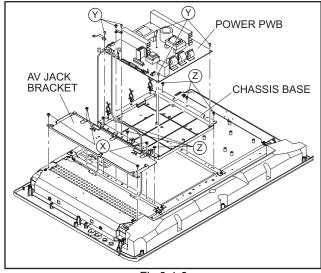


Fig.3-1-8

3.1.9 REMOVING THE SPEAKER

- · Remove the STAND.
- Remove the REAR COVER.
- · Remove the POWER CORD.
 - (1) Remove the 5 screws [a], and remove the SPEAKER BOX.

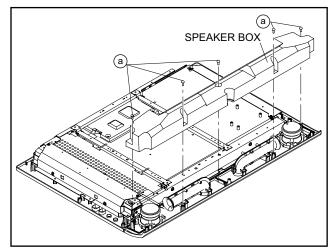


Fig.3-1-9A

- (2) Remove the 4 screws [b], and remove the SPEAKER (L / R).
- (3) Remove the 4 screws [c], and remove the DUCT COVER/DUCT BASE.

NOTE:

Since the speaker is attached in a certain direction, attach the speaker in the same correct direction as it has been attached.

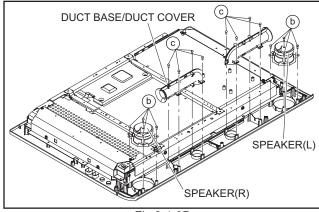


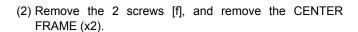
Fig.3-1-9B

3.1.10 REMOVING THE LCD PANEL UNIT

NOTE:

The LCD PANEL is fixed to the FRONT PANEL (at the back side) by using double-side adhesive tapes. To remove the LCD PANEL, remove the adhesive tape on the FRONT PANEL slowly.

- · Remove the STAND.
- · Remove the REAR COVER.
- Remove the POWER CORD.
- · Remove the RECEIVER.
- · Remove the FRONT CONTROL PWB.
- · Remove the FRONT SENSOR PWB.
- · Remove the VIDEO PWB.
- Remove the DIGITAL INPUT MODULE PWB.
- Remove the MI-COM & DIST MODULE PWB.
- · Remove the POWER PWB.
 - (1) Remove the 8 screws [d] and the 2 screws [e] (ten screws in total). Then, remove the LCD PANEL UNIT.



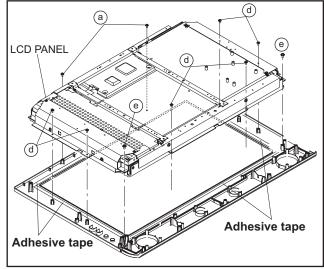


Fig.3-1-10A

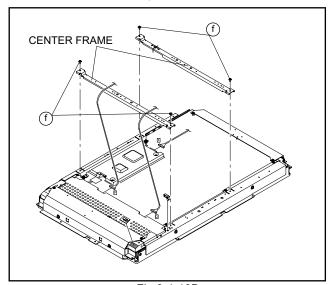


Fig.3-1-10B

total). Then, remove the FRAME (L). (5) Remove the 2 screws [j], and remove the TOP FRAME.

total). Then, remove the FRAME (R).

(6) Remove the 3 screws [k] and the 2 screws [m] (5 screws in total). Then, remove the BOTTM FRAME.

(3) Remove the 2 screws [g] and the 2 screws [h] (4 screws in

(4) Remove the 2 screws [g] and the 2 screws [h] (4 screws in

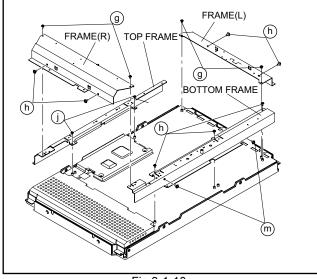


Fig.3-1-10c

3.1.11 REMOVING THE LCD PANEL

3.1.11.1 REMOVING THE CONTROL PWB

- Place the LCD PANEL with its backside facing upward.
 Be careful not to damage the surface of the screen.
 - (1) Remove the 2 screws [A], and remove the CONTROL PWB COVER.
 - (2) Remove the claws in the connectors [FPC RIGHT] and [FPC LEFT], and pull out to remove the FLEXIBLE PWB.

NOTE:

Be careful not to damage the FLEXIBLE PWB. Especially during assembly procedure, be careful not to insert the FLEXIBLE PWB in the Panel.

(3) Remove the 2 screws [B], and remove the CONTROL PWB.

[Confirmation after replacement]

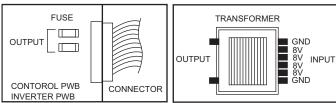
- Confirm that voltage of 10 pin (B/L On/Off) in the connector [CNI1] is approx.5.0V.
- Confirm that the voltage in output of the fuses [F1] and [F2] in the connector [CNI1] is approx.5.0V.

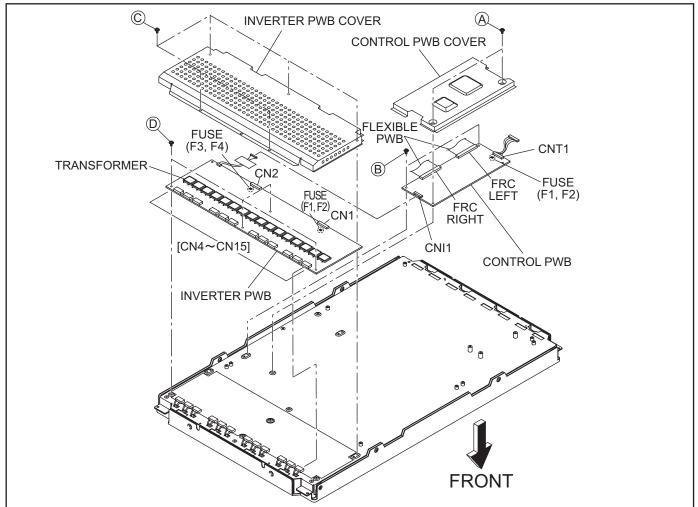
3.1.11.2 REMOVING THE INVERTER PWB

- (1) Remove the 5 screws [C], and remove the INVERTER PWB COVER.
- (2) Pull out and remove the wires from connectors [CN4]-[CN15] (12 connectors in total).
- (3) Remove the 4 screws [D], and remove the INVERTER PWB.

[Confirmation after replacement]

- Confirm that the voltage in output of the fuses [F1] and [F2] in the connector [CN1] and the fuses [F3] and [F4] in the connector [CN2] is 16V.
- Confirm that the voltage in input of the TRANSFORMER in the Inverter Board is 8V.
- · Be careful about high voltage (approx. AC900V) in output.





3.1.11.3 REMOVING THE BACKLIGHT UNIT

NOTF:

Do not carry out the following procedure in a dusty and dirty place.

If the surface of LCD GLASS, the surface of DIFFUSER SHEET, and the inside of BACKLIGHT UNIT are dusty or dirty, they cause unevenness of a displayed screen.

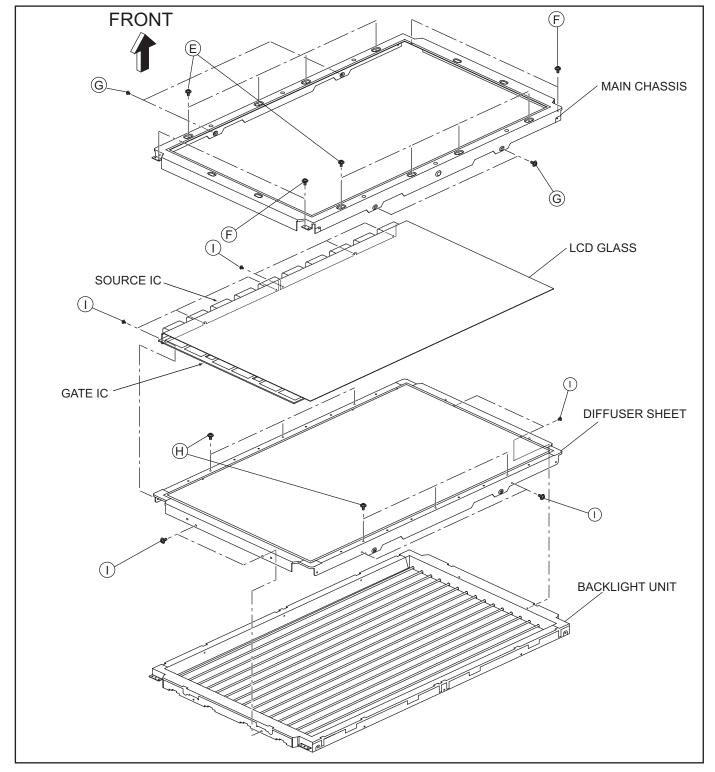
- Remove the CONTROL PWB.
- · Remove the INVERTER PWB.
- · Place the LCD UNIT with the screen facing upward.

(1) Remove the 8 screws [E], 4screws [F], and 4 screws [G] (16 screws in total), and remove the MAIN CHASSIS.

NOTE:

Be careful not to damage the SOURCE IC and the GATE IC on the side of LCD GLASS when removing the MAIN CHASSIS.

- (2) Remove the 6 screws [H] from the top side of the LCD UNIT.
- (3) Remove the 12 screws [I] from the sides of the LCD UNIT. Then, LCD GLASS, DIFFUSER SHEET, and BACKLIGHT UNIT are removed.



3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 MEMORY IC REPLACEMENT PROCEDURE

1. Power off

Switch off the power and disconnect the power plug from the AC outlet.

2. Replace the memory IC

Be sure to use the memory IC written with the initial setting values.

3. Power on

Connect the power plug to the AC outlet and switch on the power.

4. Receiving channel setting

Refer to the OPERATING INSTRUCTIONS and set the receive channels (Channels Preset) as described.

5. User setting

Check the user setting items according to the given in page later. Where these do not agree, refer to the OPERATING INSTRUCTIONS and set the items as described.

6. SERVICE MENU setting

Verify what to set in the SERVICE MENU, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.

3.2.2 SERVICE MENU SETTING ITEMS

SERVICE MODE

1.PICTURE/SOUND 7.PANEL
2.YC SEP 8.PP
3.WHITE BALANCE 9.IP
4.MEMORY SETUP 0.HDMI
5.RF AFC
6.DD/CM

Fig.1

•									
Setting items Settings Item No.									
1. PICTURE/SOUND (sound and picture setting)									
Fixed	A01~A27								
Adjust	S01~S99								
Fixed	D01~D32								
Adjust	F01~F59								
eparation s	setting)								
Adjust	YCM001~YCM185								
Fixed	YCS001~YCS114								
adjust]									
ata edit) [[Do not adjust]								
aticaly set)	[Do not adjust]								
ing setting)								
Adjust	DDT01~DDT34								
Fixed	CMT01~CMT57								
ntrol) [Do r	not adjust]								
Fixed	PDA001~PDA012								
etting)									
Adjust	ADM001~ADM034								
Fixed	PPA001~PPA008								
Fixed	PPB001~PPB036								
Fixed	PPC001~PPC008								
Fixed	PPD001~PPD025								
Do not ad	just]								
Fixed	IPA001~IPA120								
Fixed	IPB001~IPB079								
Fixed	IPC001~IPC044								
Fixed	IPD001~IPD026								
Fixed	IPE001~IPE015								
etting) [Do	not adjust]								
Fixed	HDM001~HDM080								
Fixed	RHD001~RHD170								
	picture so Fixed Adjust Fixed F								

3.2.3 SETTINGS OF FACTORY SHIPMENT

3.2.3.1 BUTTON OPERATION

Setting item	Setting position
POWER	OFF
INPUT	TV
CHANNEL	CABLE-02
VOLUME	10

3.2.3.2 REMOTE CONTROL DIRECT OPERATION

Set	ting item	Setting position		
INPUT		TV		
CHANNEL		CABLE-02		
VOLUME		10		
MUTING		OFF		
DISPLAY		OFF		
SOUND	A.H.S	OFF		
	BBE	ON		
	A.H.B	ON		
ASPECT	NTSC, 525i,525p	PANORAMA		
	750p,1125i	FULL		
OFF TIMER		OFF		
VIDEO STA	TUS	DYNAMIC		
NATURAL C	INEMA	AUTO		

3.2.3.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE ADJUSTMENT

Customers can adjust the picture setting of menu screen as their own like but the picture standard value during factory shipment is as below.

■ NTSC MODE

Setting item	PICTURE	BRIGHT	COLOR	TINT	DETAIL	COLOR TEMPERATURE	DIGI. NOISE CLEAR	COLOR MANAGEMENT
DINAMIC	+07	+05	00	00	+04	HIGH	OFF	VIVID
STANDARD	00	00	00	00	00	LOW	OFF	STD
GAME	-05	00	+05	00	-03	HIGH	OFF	STD
THEATER	00	00	00	00	00	HIGH	OFF	STD

■ HD MODE

Setting item	PICTURE	BRIGHT	COLOR	TINT	DETAIL	COLOR TEMPERATURE	DIGI. NOISE CLEAR	COLOR MANAGEMENT
DINAMIC	+04	+06	-08	00	+02	HIGH	OFF	VIVID
STANDARD	00	00	00	00	00	LOW	OFF	STD
GAME	-05	00	+05	00	00	HIGH	OFF	STD
THEATER	00	00	00	00	00	LOW	OFF	STD

(2) SOUND ADJUST

Setting item	Setting position
TREBLE	00
BASS	00
BALANCE	00
MTS	STEREO

(3) CLOCK / TIMERS

Setting item	Setting position
SET CLOCK	
ON / OFF TIMER	NO

(4) INITIAL SETUP

Setting iter	n	Setting position	Setting item	Setting position
POSITION ADJUSTN	/IENT	Center	NOISE MUTING	ON
VIDEO STATUS		DYNAMIC	FRONT PANEL LOCK	OFF
XDS ID		ON	AUTO SHUT OFF	OFF
POWER INDICATOR		HIGH	DIGITAL-IN	SIZE-1
VIDEO-1 MONITOR	OUT	OFF	V-CHIP	OFF
LANGUAGE		KOR	AUTO DEMO	OFF
CLOSED CAPTION	CAPTION	CC1	IMAGE SHIFT	STD
CLOSED CAPTION	TEXT	T1	V1 SMART INPUT	OFF

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

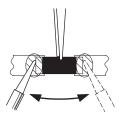
- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

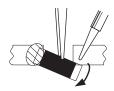
1. How to remove Chip parts

[Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



(2) Shift with the tweezers and remove the chip part.

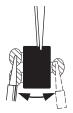


[Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



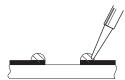
NOTE:

After removing the part, remove remaining solder from the pattern.

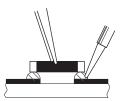
2. How to install Chip parts

[Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

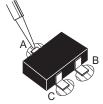


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

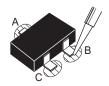


[Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



(4) Then solder leads **B** and **C**.



SECTION 4 ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

- (1) There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.
- (2) The adjustment using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- (3) Make sure that connection is correctly made AC to AC power source.
- (4) Turn on the power of the TV and measuring instruments for warning up for at least 30 minutes before starting adjustments.
- (5) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- (6) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
- (7) Preparation for adjustment. Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

Setting item	Settings
VIDEO STATUS	STANDARD
BRIGHT / CONTRAST / COLOR / TINT	00
COLOR TEMPERATURE	LOW
DIG. NOISE CLEAR	OFF
COLOR MANEGMENT	STANDARD
NATURAL CINEMA	OFF
TREBLE / BASS / BALANCE	00
BBE	OFF
A.H.S	OFF
A.H.B	OFF
ASPECT	FULL

4.2 MEASURING INSTRUMENT AND FIXTURES

- DC voltmeter (or digital voltmeter)
- Oscilloscope
- Signal generator (Pattern generator) [NTSC / 525i / 525p / 750p / 1125i / DIGITAL]
- · TV audio multiplex signal generator
- · Remote control unit

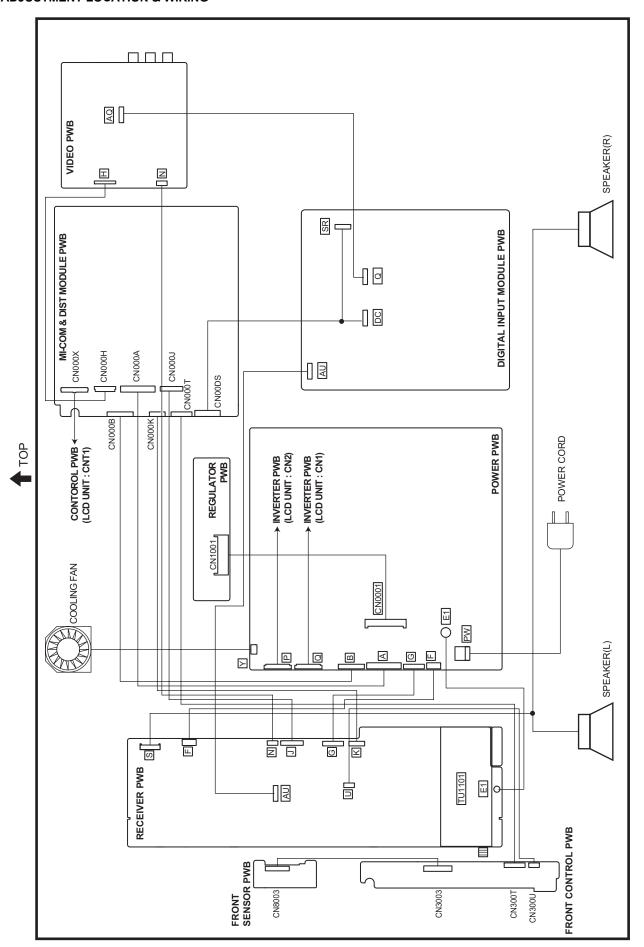
4.3 ADJUSTMENT ITEMS

■ VIDEO CIRCUIT

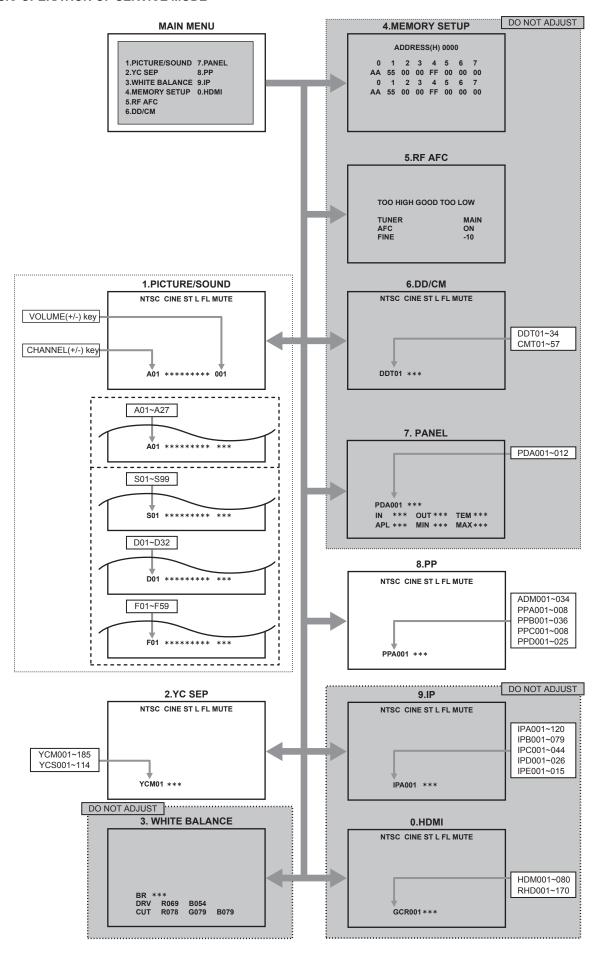
- · COMPONENT INPUT BLACK LEVEL adjustment
- COMPONENT INPUT A-D CONVERTER GAIN adjustment
- COMPONENT INPUT A-D CONVERTER OFFSET adjustment
- COMPOSITE INPUT BLACK LEVEL adjustment
- COMPOSITE INPUT A-D CONVERTER OFFSET adjustment
- SUB-SCREEN BLACK LEVEL adjustment
- · SUB-SCREEN A-D CONVERTER GAIN adjustment
- WHITE BALANCE (HIGHLIGHT) adjustment

■ MTS CIRCUIT

- · MTS INPUT LEVEL adjustment
- · MTS SEPARATION adjustment



4.5 BASIC OPERATION OF SERVICE MODE



4.5.1 TOOL OF SERVICE MODE OPERATION

Operate the SERVICE MODE with the REMOTE CONTROL UNIT.

4.5.2 SERVICE MODE ITEMS

In general, basic setting (adjustments) items or verifications are performed in the SERVICE MODE.

1.PICTURE / SOUND	This sets the setting values of the VIDEO, AUDIO and DEFLECTION circuits.
2.YC SEP	This is used when the YC separation circuit is adjusted.
3.WHITE BALANCE	This sets the setting values of the WHITE BALANCE. [Do not adjust]
4.MEMORY SETUP	This sets the setting values of the MEMORY ADDRESS. [Do not adjust]
5.RF AFC	This is used when the IF VCO is adjusted. [Do not adjust]
6.DD/CM	This sets the setting values of the panel image processing.
7.PANEL	This sets the setting values of the panel power limit control.
8.PP	This sets the setting value of the output of MULTI-PICTURE circuit.
9.IP	This sets the setting value of the DIST circuit. [Do not adjust]
0.HDMI	This sets the setting value of the DIGITAL INPUT MODULE circuit. [Do not adjust].

4.5.3 HOW TO ENTER THE SERVICE MODE

NOTE:

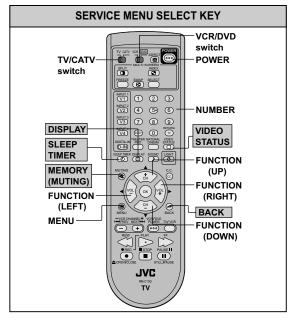
Ensure that the cursor (arrow) of the User Menu screen is pointing at Picture Control.

Before entering the SERVICE MODE, confirm that the setting of TV / CATV switch of the REMOTE CONTROL UNIT is at the "TV" side and the setting of VCR / DVD switch is at the "VCR" side. If the switches have not been properly set, you cannot enter the SERVICE MODE.

- (1) Set to 0 minutes using the [SLEEP TIMER] key.
- (2) Press the [VIDEO STATUS] key and [DISPLAY] key simultaneously, then enter the SERVICE MODE mode.
- (3) When the Main Menu is displayed, press any key of the [0] to [9] key to enter the corresponding menu mode.
 *Press any of the [0] to [9] keys before the SERVICE MODE mode disappears.
- (4) Select the service item using the [CH +] / [CH] key.
- (5) Set the value using the [VOL +] / [VOL] key.
- (6) Press the [MUTING] key to save the value.

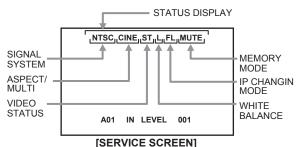
4.5.4 HOW TO EXIT THE SERVICE MODE

Press the [BACK] key to exit the Service mode.



4.5.5 DESCRIPTION OF STATUS DISPLAY

The status display on the upper part of the SERVICE MODE screen is common (to all models).



(1) SIGNAL SYSTEM

NTSC : Composite, S-video (Y / C), RF, No signal.

DVD : 525i (component)

ED : 525p HD : 1125i 750p : 750p

HED1 : DIGITAL 525p SIZE1
HED2 : DIGITAL 525p SIZE2
HHD : DIGITAL 1125i
H750 : DIGITAL 750p

(2) ASPECT / MULTI

ONE SCREEN

FULL : FULL

PANO : PANORAMA
CINE : CINEMA
REGU : REGULAR

MULTI SCREEN

M1 : One screen (for adjustment)

M2-1 : SPLIT M12 : INDEX

(3) VIDEO STATUS

ST : STANDARD
DA : DYNAMIC
TH : THEATER
GA : GAME

(4) WHITE BALANCE

H : HIGH L : LOW

(5) IP CHANGING MODE

FL: FRAME L1: LINE

23 : COMPULSORY NATURAL CINEMA IN

(6) MEMORY MODE

MUTE : Press [MUTING] key

DIR : Change data then memory at the same time.

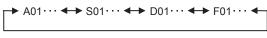
4.5.6 SERVICE MODE SETTING

1. PICTURE/SOUND

AUDIO, VIDEO, DEFLECTION data adjustment. (1) SETTING ITEM No.

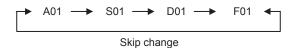
A : AUDIO
S : SIGNAL
D : DEFLECTION
F : FACTORY SETTING

Press [CH+] / [CH-] key



Item No. is up/down

• Press [SLEEP TIMER] key



(2) SETTING ITEM NAME Describe setting item name

(3) SETTING VALUE

Set the setting value.

- Press [VOL+] / [VOL-] key Set the setting value.
- Press [MUTING] key Memorize the data.

NOTE:

Setting for any of the following items that is not included in the "ADJUSTMENT PROCEDURE" section found in the later part of this manual will not be performed in servicing.

2. YC SEP (3D Y/C separation setting)

[Do not change settings of items that are not included in the "ADJUSTMENT PROCEDURE" section.]

Sets output data to the 3D Y/C separation circuit.

• Press [CH+] / [CH-] key

For scrolling up/down the item codes.

• Press [VOL+] / [VOL-] key

For scrolling up/down the data values.

3. WHITE BALANCE (White balance setting)

[Setting for this item is not required in servicing.]

4. MEMORY SETUP (Memory setting)

[Do not change settings]

5. RF AFC

Setting for this item is not required in servicing.

6. DD/CM

[Do not change settings]

Adjustment of color manegment and device driver

7. PANEL (Panel power limit control)

[Do not change settings]

8. PP (Multi-screen processing setting)

[Do not change settings of items that are not included in the "ADJUSTMENT PROCEDURE" section.]

Sets output data to the multi-screen processing circuit.

Press [CH+] / [CH-] key

For scrolling up/down the item codes.

• Press [VOL+] / [VOL-] key

For scrolling up/down the data values.

9. IP (DIST setting)

[Do not change settings]

Sets output data to the DIST circuit.

0. HDMI

[Do not change settings]

Sets output data to the DIGITAL INPUT circuit

4.6 INITIAL SETTING VALUES IN THE SERVICE MODE

- · Perform fine-tuning based on the "initial values" using the remote control when in the Service mode.
- The "initial values" serve only as an indication rough standard and therefore the values with which optimal display can be achieved may be different from the default values. But, don't change the values that are not written in "ADJUSTMENT PROCEDURE". They are fixed values.

NOTE:

As for the items whose settings are "Fixed" in Table 1 in "3.3 MEMORY IC REPLACEMENT", the following tables show initial values in NTSC signal input mode. As for the items whose conditions of SETTING VALUE are not written in the following tables, the following tables show initial values in NTSC signal input mode.

4.6.1 [1.PICTURE/SOUND]

	######################################							
Item No.	Item	Variable range	Setting value					
A01	(Not display)	000~007	001					
A02	(Not display)	000~007	001					
A03	(Not display)	000~007	001					
A04	(Not display)	000~007	000					
A05	(Not display)	000~015	003					
A06	(Not display)	000~015	004					
A07	(Not display)	000~015	006					
A08	(Not display)	000~015	003					
A09	(Not display)	000~007	006					
A10	(Not display)	000~007	004					
A11	(Not display)	000~063	063					
A12	(Not display)	000~063	063					
A13	(Not display)	000~003	000					
A14	(Not display)	000~007	000					

Item No.	Item	Variable range	Setting value
A15	(Not display)	000~003	000
A16	(Not display)	000~003	000
A17	(Not display)	000~003	000
A18	IN LEVEL	000~015	007
A19	LOW SEP	LOW SEP 000~063	
A20	HI SEP	000~063	063
A21	(Not display)	(Not display) 000~001	
A22	(Not display)	000~001	(Not used)
A23	(Not display)	000~001	(Not used)
A24	(Not display)	000~001	(Not used)
A25	(Not display)	000~001	(Not used)
A26	(Not display)	000~001	(Not used)
A27	(Not display)	000~001	(Not used)

						Setting	g value			
Item No.	Item	Variable range	NTSC		525i		525p		750p/1125i	
140.		range	STANDARD	THEATER	STANDARD	THEATER	STANDARD	THEATER	STANDARD	THEATER
S01	COLOR	000~255	163	122	163	121	163	124	155	146
S02	TINAD	-127~128	000	000	000	000	000	000	000	000
S03	OF COLOR	-127~128	000	000	000	000	000	000	000	000
S04	OF TINAD	-127~128	000	000	000	000	000	000	000	000
S05	BRIG	000~255	048	060	048	060	048	060	036	043
S06	CONT	000~255	126	126	126	126	126	126	128	128
S07	OF BRIG	-127~128	000	000	000	000	000	000	000	000
S08	OF CONT	-127~128	000	000	000	000	000	000	000	000
S09	BYGN	000~255	133	117	125	116	125	116	147	118
S10	OF BYGN	-127~128	000	000	000	000	000	000	000	000
S11	RYAXIS	-127~128	+006	000	+006	000	+006	000	000	000
S12	MIX	000~003	000	000	000	000	000	000	001	001
S13	RDRV	000~255	255	255	255	255	255	255	246	246
S14	RDRV	-127~128	000	000	000	000	000	000	000	000
S15	GDRV	000~255	254	254	254	254	254	254	255	255
S16	GDRV	-127~128	000	-038	000	-038	000	-038	000	-027
S17	BDRV	000~255	255	255	255	255	255	255	225	225
S18	BDRV	-127~128	000	-043	000	-043	000	-043	000	-038
S19	CUTR	000~255	128	128	128	128	128	128	128	128

			Setting value							
Item No.	Item	Variable range	NT	sc	52	:5i	52	5p	750p/	1125i
			STANDARD	THEATER	STANDARD	THEATER	STANDARD	THEATER	STANDARD	THEATER
S20	OF CUTR	-127~128	000	+004	000	+004	000	+004	000	000
S21	CUTG	000~255	128	128	128	128	128	128	128	128
S22	OF CUTG	-127~128	000	000	000	000	000	000	000	000
S23	CUTB	000~255	128	128	128	128	128	128	128	128
S24	OF CUTB	-127~128	000	000	000	000	000	000	000	000
S25	CUTR	000~001	000	000	000	000	000	000	000	000
S26	CUTG	000~001	000	000	000	000	000	000	000	000
S27	CUTB	000~001	000	000	000	000	000	000	000	000
S28	BTHN	000~001	000	000	000	000	000	000	001	000
S29	BCALM	000~001	000	000	000	000	000	000	000	000
S30	BKAKOU	000~031	000	012	000	000	000	000	000	000
S31	BLIM	000~063	010	000	010	000	010	000	002	000
S32	BSTPO	000~063	050	063	050	063	050	063	018	063
S33	BKAKON	000~001	001	001	001	001	001	001	001	001
S34	WTHN	000~001	001	001	001	001	001	001	001	001
S35	WCALM	000~001	000	000	000	000	000	000	000	001
S36	WKAKOU	000~031	000	000	000	000	000	000	000	000
S37	WLIM	000~255	220	213	220	213	220	213	220	225
S38	WSTPO	000~063	050	036	050	036	050	036	050	050
S39	WPEAK	000~063	060	063	060	063	060	063	060	060
S40	WKAKON	000~001	001	001	001	001	001	001	001	001
S41	WGAINC	000~001	000	001	001	001	001	001	001	001
S42	GAINB	000~003	001	000	001	000	001	000	002	000
S43	SLIC	000~031	009	009	009	009	009	009	009	009
S44	APG	000~003	001	001	001	001	001	001	001	001
S45	GAINA	000~003	002	002	002	002	002	002	002	002
S46	(Not used)	000~015	015	015	015	015	015	015	015	015
S47	(Not used)	000~015	015	015	015	015	015	015	015	015
S48	DCTRAN	000~015	015	015	015	015	015	015	015	015

			Setting	g value
Item No.	Item	Variable range	MULTI-SCREEN	ASPECT
			SPLIT	REGULAR
S49	HSTR	000~001	001	000
S50	HSTR	000~255	010	018
S51	HEND	000~001	000	000
S52	HEND	000~255	087	079
S53	VSTR	000~001	000	000
S54	VSTR	000~255	026	006
S55	VEND	000~001	000	000
S56	VEND	000~255	077	096
S57	BHSTR	000~255	000	000
S58	BHSTR	000~015	000	000
S59	BHEND	000~255	000	000

14		Martala.	Setting value		
Item No.	Item Variable range MULTI-SCREEN		MULTI-SCREEN	ASPECT	
NO.			SPLIT	REGULAR	
S60	BHEND	000~015	000	000	

Data of the setting value is selected in the order of "SPLIT" and "REGULAR".

Item No.		variable range	Setting value						
	Item		NTSC		525i/525p		750p/1125i		
	ito. Tunge		STANDARD	THEATER	STANDARD	THEATER	STANDARD	THEATER	
S61	PLPOL2	000~001	001	001	001	001	001	001	
S62	PLEV2	000~127	016	016	016	016	016	016	
S63	PLPOL1	000~001	000	000	000	000	000	000	
S64	PLEV1	000~127	000	000	000	000	000	000	

						Setting	g value			
l.,		.,		NT	sc				750p/1125i STANDARD THEATER 002 002 003 003	
Item No.	Item	Variable range	MULTI-S	CREEN	ASP	ECT	525i/	525p	750p/	1125i
110.		rungo	SP	LIT	REGI	JLAR				
			STANDARD	THEATER	STANDARD	THEATER	STANDARD	THEATER	THEATER STANDARD TH	THEATER
S65	MODC	000~003	002	002	002	002	002	002	002	002
S66	RMC	000~003	003	003	001	003	000	003	003	003
S67	RGA	000~003	003	003	003	003	002	003	003	003
S68	CLIP	000~015	000	000	000	000	000	000	000	000
S69	COR	000~063	019	019	019	019	019	019	019	019

Item No.	Item	Variable range	Setting value
S70	TINTON	001~001	001
S71	DRIVER	000~255	240
S72	DRIVEG	000~255	240
S73	DRIVEB	000~255	255
S74	EECONT	000~031	000
S75	EEBRT	000~031	000
S76	EETBRT	-127~128	000
S77	EETCONT	-127~128	000
S78	PICMAX	000~255	255
S79	PICMIN	000~255	000
S80	BRTMAX	000~255	255
S81	BRTMIN	000~255	000
S82	COLMAX	000~255	255
S83	COLMIN	000~255	000
S84	PWMDIM	000~255	216
S85	ADIM	000~255	127
S86	(Not display)	000~255	127
S87	(Not display)	000~007	003
S88	APLGAIN	000~007	000
S89	APLLIM	000~255	000
S90	ABSGAIN	000~127	000
S91	BLKGAIN	000~007	007

Item No.	Item	Variable range	Setting value
S92	BLKLIM	000~031	031
S93	WHTGAIN	000~007	007
S94	WHTLIM	000~031	031
S95	DCSTART	000~255	035
S96	DCGAIN	000~015	006
S97	DCLIM	000~063	035
S98	(Not display)	000~001	000
S99	(Not display)	000~003	000

Item No.	Item	Variable range	Setting value
D01	(Not display)	000~001	000
D02	(Not display)	000~001	000
D03	(Not display)	000~001	000
D04	(Not display)	000~001	000
D05	(Not display)	000~001	000
D06	(Not display)	000~001	000
D07	(Not display)	000~001	000
D08	(Not display)	000~001	000
D09	(Not display)	000~001	000
D10	(Not display)	000~001	000
D11	(Not display)	000~001	000
D12	(Not display)	000~001	000
D13	(Not display)	000~001	000
D14	(Not display)	000~001	000
D15	(Not display)	000~001	000
D16	(Not display)	000~001	000
D17	(Not display)	000~001	000
D18	(Not display)	000~001	000
D19	(Not display)	000~001	000
D20	(Not display)	000~001	000
D21	(Not display)	000~001	000
D22	(Not display)	000~001	000
D23	(Not display)	000~001	000
D24	(Not display)	000~001	000
D25	(Not display)	000~001	000
D26	(Not display)	000~001	000
D27	(Not display)	000~001	000
D28	(Not display)	000~001	000
D29	(Not display)	000~001	000
D30	(Not display)	000~001	000
D31	(Not display)	000~001	000
D32	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
F01	(Not display)	000~255	001
F02	(Not display)	000~255	000
F03	(Not display)	000~255	000
F04	(Not display)	000~255	032
F05	CATVMAX	000~001	000
F06	(Not display)	000~001	002
F07	(Not display)	000~255	027
F08	(Not display)	000~255	000
F09	AUTOCSR1	000~015	002
F10	AUTOCSR2	000~015	004
F11	AUTOCSR3	000~015	004
F12	AUTOCSR4	000~015	005
F13	AUTOCSR5	000~015	006
F14	AUTOCSR6	000~015	007
F15	AUTOCSR7	000~015	007
F16	(Not display)	000~127	070
F17	(Not display)	000~001	000
F18	FIX DATA	000~001	000
F19	(Not display)	000~001	000
F20	(Not display)	000~255	005
F21	(Not display)	000~255	002
F22	(Not display)	000~001	000
F23	(Not display)	000~255	000
F24	(Not display)	000~255	098
F25	(Not display)	000~255	006
F26	(Not display)	000~255	040
F27	(Not display)	000~255	040
F28	(Not display)	000~001	000
F29	(Not display)	000~001	000
F30	(Not display)	000~001	000
F31	(Not display)	000~001	000
F32	(Not display)	000~001	000
F33	(Not display)	000~001	000
F34	(Not display)	000~001	000
F35	(Not display)	000~001	000
F36	(Not display)	000~001	000
F37	(Not display)	000~001	000
F38	(Not display)	000~001	000
F39	(Not display)	000~001	000
F40	(Not display)	000~001	000

Item	Item	Variable		S	etting valu	ne	
No.	o.	range	NTSC	525i	525p	750p	1125i
F41	(Not display)	000~003	000	002	002	002	002
F42	(Not display)	000~001	000	000	000	000	000
F43	(Not display)	000~063	039	040	037	024	024

Item No.	Item	Variable range	Setting value
F44	(Not display)	000~001	000
F45	(Not display)	000~007	000
F46	OUT LV.	000~255	090
F47	LIMIT B	000~255	000
F48	LIMIT A	000~255	000
F49	(Not display)	000~255	128
F50	(Not display)	000~255	128
F51	(Not display)	000~255	128
F52	(Not display)	000~255	255
F53	(Not display)	000~001	000
F54	(Not display)	000~001	000
F55	(Not display)	000~001	255
F56	(Not display)	000~001	141
F57	(Not display)	000~001	000
F58	(Not display)	000~001	141
F59	(Not display)	000~001	001
F60	(Not display)	000~001	000
F61	(Not display)	000~001	000
F62	(Not display)	000~001	015
F63	ATT GAIN	000~001	001
F64	(Not display)	000~001	073
F65	(Not display)	000~001	001
F66	(Not display)	000~001	000
F67	(Not display)	000~001	070
F68	(Not display)	000~001	000
F69	(Not display)	000~001	000
F70	(Not display)	000~001	000

4.6.2 [2.YC SEP]

NOTE:

Initial setting value is reference value at following condition.

INPUT SIGNAL : NTSC
ASPECT : FULL
MULTI-SCREEN : SINGLE
VIDEO STATUS : STANDARD

COLOR TEMPERATURE: LOW

Item No.	Item	Variable range	Setting value
YCM001	(Not display)	000~001	000
YCM002	(Not display)	000~001	000
YCM003	(Not display)	000~001	000
YCM004	(Not display)	000~003	001
YCM005	(Not display)	000~255	239
YCM006	(Not display)	000~003	001
YCM007	(Not display)	000~255	239
YCM008	(Not display)	000~001	000
YCM009	(Not display)	000~003	000
YCM010	(Not display)	000~001	000
YCM011	(Not display)	000~001	000
YCM012	(Not display)	000~001	000
YCM013	(Not display)	000~001	000
YCM014	(Not display)	000~003	000
YCM015	(Not display)	000~001	000
YCM016	(Not display)	000~003	000
YCM017	(Not display)	000~001	001
YCM018	(Not display)	000~003	000
YCM019	(Not display)	000~001	000
YCM020	(Not display)	000~001	000
YCM021	(Not display)	000~003	002
YCM022	(Not display)	000~007	004
YCM023	(Not display)	000~001	001
YCM024	(Not display)	000~001	000
YCM025	(Not display)	000~015	005
YCM026	(Not display)	000~015	003
YCM027	(Not display)	000~003	000
YCM028	(Not display)	000~007	004
YCM029	(Not display)	000~007	006
YCM030	(Not display)	000~003	000
YCM031	(Not display)	000~001	000
YCM032	(Not display)	000~003	003
YCM033	(Not display)	000~001	001
YCM034	(Not display)	000~001	001
YCM035	(Not display)	000~255	096
YCM036	(Not display)	000~001	001
YCM037	(Not display)	000~003	001
YCM038	(Not display)	000~127	062

Item No.	Item	Variable range	Setting value
YCM039	(Not display)	000~127	068
YCM040	(Not display)	000~003	002
YCM041	(Not display)	000~063	016
YCM042	(Not display)	000~001	000
YCM043	(Not display)	000~001	000
YCM044	(Not display)	000~255	182
YCM045	(Not display)	000~001	000
YCM046	(Not display)	000~255	127
YCM047	(Not display)	000~001	001
YCM048	(Not display)	000~001	001
YCM049	(Not display)	000~001	001
YCM050	(Not display)	000~001	001
YCM051	(Not display)	000~001	000
YCM052	(Not display)	000~001	000
YCM053	(Not display)	000~001	000
YCM054	(Not display)	000~003	003
YCM055	(Not display)	000~003	003
YCM056	(Not display)	000~003	000
YCM057	(Not display)	000~001	000
YCM058	(Not display)	000~001	001
YCM059	(Not display)	000~001	001
YCM060	(Not display)	000~001	000
YCM061	(Not display)	000~001	001
YCM062	(Not display)	000~015	001
YCM063	(Not display)	000~015	005
YCM064	(Not display)	000~003	000
YCM065	(Not display)	000~063	060
YCM066	(Not display)	000~063	040
YCM067	(Not display)	000~063	025
YCM068	(Not display)	000~063	012
YCM069	(Not display)	000~063	036
YCM070	(Not display)	000~063	031
YCM071	(Not display)	000~127	031
YCM072	(Not display)	000~001	001
YCM073	(Not display)	000~001	001
YCM074	(Not display)	000~063	024
YCM075	(Not display)	000~001	000
YCM076	(Not display)	000~001	001
YCM077	(Not display)	000~063	010
YCM078	(Not display)	000~063	001
YCM079	(Not display)	000~255	000
YCM080	(Not display)	000~255	000
YCM081	(Not display)	000~255	000
YCM082	(Not display)	000~255	000

Item No.	Item	Variable range	Setting value
YCM083	(Not display)	000~001	001
YCM084	(Not display)	000~063	012
YCM085	(Not display)	000~001	000
YCM086	(Not display)	000~001	000
YCM087	(Not display)	000~063	028
YCM088	(Not display)	000~001	001
YCM089	(Not display)	000~031	000
YCM090	(Not display)	000~003	000
YCM091	(Not display)	000~015	000
YCM092	(Not display)	000~015	000
YCM093	(Not display)	000~015	003
YCM094	(Not display)	000~063	002
YCM095	(Not display)	000~255	050
YCM096	(Not display)	000~001	000
YCM097	(Not display)	000~063	032
YCM098	(Not display)	000~015	800
YCM099	(Not display)	000~015	005
YCM100	(Not display)	000~015	800
YCM101	(Not display)	000~015	005
YCM102	(Not display)	000~015	000
YCM103	(Not display)	000~015	002
YCM104	(Not display)	000~015	800
YCM105	(Not display)	000~015	006
YCM106	(Not display)	000~255	010
YCM107	(Not display)	000~255	032
YCM108	(Not display)	000~255	031
YCM109	(Not display)	000~255	064
YCM110	(Not display)	000~001	000
YCM111	(Not display)	000~001	001
YCM112	(Not display)	000~001	001
YCM113	(Not display)	000~001	001
YCM114	(Not display)	000~001	000
YCM115	(Not display)	000~001	001
YCM116	(Not display)	000~001	000
YCM117	(Not display)	000~001	000
YCM118	(Not display)	000~001	001
YCM119	(Not display)	000~001	000
YCM120	(Not display)	000~001	000
YCM121	(Not display)	000~003	003
YCM122	(Not display)	000~001	000
YCM123	(Not display)	000~255	000
YCM124	(Not display)	000~001	000
YCM125	(Not display)	000~255	002
YCM126	(Not display)	000~001	000
YCM127	(Not display)	000~001	001

Item No.	Item	Variable range	Setting value
YCM128	(Not display)	000~001	001
YCM129	(Not display)	000~001	001
YCM130	(Not display)	000~003	001
YCM131	(Not display)	000~255	046
YCM132	(Not display)	000~255	152
YCM133	(Not display)	000~255	055
YCM134	(Not display)	000~007	001
YCM135	(Not display)	000~255	136
YCM136	(Not display)	000~001	000
YCM137	(Not display)	000~001	001
YCM138	(Not display)	000~007	003
YCM139	(Not display)	000~255	141
YCM140	(Not display)	000~007	000
YCM141	(Not display)	000~255	014
YCM142	(Not display)	000~001	000
YCM143	(Not display)	000~007	005
YCM144	(Not display)	000~255	128
YCM145	(Not display)	000~001	000
YCM146	(Not display)	000~001	001
YCM147	(Not display)	000~001	001
YCM148	(Not display)	000~001	001
YCM149	(Not display)	000~001	000
YCM150	(Not display)	000~001	000
YCM151	(Not display)	000~255	136
YCM152	(Not display)	000~001	001
YCM153	(Not display)	000~001	001
YCM154	(Not display)	000~001	001
YCM155	(Not display)	000~003	000
YCM156	(Not display)	000~015	015
YCM157	(Not display)	000~015	004
YCM158 YCM159	(Not display)	000~001	001
YCM160	(Not display)	000~127	004
YCM161	(Not display)	000~001	001
YCM162	(Not display) (Not display)	000~031 000~001	000
YCM163	(Not display)	000~001	003
YCM164	(Not display)	000~013	002
YCM165	(Not display)	000~007	016
YCM166	(Not display)	000~255	235
YCM167	(Not display)	000~003	000
YCM168	(Not display)	000~063	000
YCM169	(Not display)	000~015	003
YCM170	(Not display)	000~015	003
YCM171	(Not display)	000~007	000
YCM172	(Not display)	000~255	096

Item No.	Item	Variable range	Setting value
YCM173	(Not display)	000~007	003
YCM174	(Not display)	000~255	056
YCM175	(Not display)	000~001	000
YCM176	(Not display)	000~001	000
YCM177	(Not display)	000~255	022
YCM178	(Not display)	000~001	001
YCM179	(Not display)	000~001	000
YCM180	(Not display)	000~007	003
YCM181	(Not display)	000~003	001
YCM182	(Not display)	000~003	001
YCM183	(Not display)	000~003	001
YCM184	(Not display)	000~003	001
YCM185	(Not display)	000~255	000

Item No.	Item	Variable range	Setting value
YCS001	(Not display)	000~001	000
YCS002	(Not display)	000~001	000
YCS003	(Not display)	000~001	000
YCS004	(Not display)	000~003	001
YCS005	(Not display)	000~255	239
YCS006	(Not display)	000~003	001
YCS007	(Not display)	000~255	239
YCS008	(Not display)	000~001	000
YCS009	(Not display)	000~003	000
YCS010	(Not display)	000~001	000
YCS011	(Not display)	000~001	000
YCS012	(Not display)	000~001	000
YCS013	(Not display)	000~001	000
YCS014	(Not display)	000~003	000
YCS015	(Not display)	000~001	000
YCS016	(Not display)	000~003	000
YCS017	(Not display)	000~001	001
YCS018	(Not display)	000~003	000
YCS019	(Not display)	000~001	000
YCS020	(Not display)	000~001	000
YCS021	(Not display)	000~003	002
YCS022	(Not display)	000~007	004
YCS023	(Not display)	000~001	001
YCS024	(Not display)	000~001	000
YCS025	(Not display)	000~015	005
YCS026	(Not display)	000~015	003
YCS027	(Not display)	000~003	000
YCS028	(Not display)	000~007	004
YCS029	(Not display)	000~007	006
YCS030	(Not display)	000~003	000

Item No.	Item	Variable range	Setting value
YCS031	(Not display)	000~001	000
YCS032	(Not display)	000~003	003
YCS033	(Not display)	000~001	001
YCS034	(Not display)	000~001	001
YCS035	(Not display)	000~255	096
YCS036	(Not display)	000~001	001
YCS037	(Not display)	000~003	001
YCS038	(Not display)	000~127	062
YCS039	(Not display)	000~127	068
YCS040	(Not display)	000~003	002
YCS041	(Not display)	000~063	016
YCS042	(Not display)	000~001	000
YCS043	(Not display)	000~001	000
YCS044	(Not display)	000~255	160
YCS045	(Not display)	000~001	000
YCS046	(Not display)	000~255	111
YCS047	(Not display)	000~001	001
YCS048	(Not display)	000~031	000
YCS049	(Not display)	000~003	000
YCS050	(Not display)	000~015	000
YCS051	(Not display)	000~015	800
YCS052	(Not display)	000~015	001
YCS053	(Not display)	000~063	015
YCS054	(Not display)	000~255	020
YCS055	(Not display)	000~001	000
YCS056	(Not display)	000~063	025
YCS057	(Not display)	000~015	800
YCS058	(Not display)	000~015	005
YCS059	(Not display)	000~015	800
YCS060	(Not display)	000~015	005
YCS061	(Not display)	000~015	000
YCS062	(Not display)	000~015	002
YCS063	(Not display)	000~015	800
YCS064	(Not display)	000~015	006
YCS065	(Not display)	000~255	010
YCS066	(Not display)	000~255	032
YCS067	(Not display)	000~255	031
YCS068	(Not display)	000~255	089
YCS069	(Not display)	000~001	000
YCS070	(Not display)	000~001	001
YCS071	(Not display)	000~001	001
YCS072	(Not display)	000~001	001
YCS073	(Not display)	000~001	000
YCS074	(Not display)	000~001	001
YCS075	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
YCS076	(Not display)	000~001	000
YCS077	(Not display)	000~001	000
YCS078	(Not display)	000~001	000
YCS079	(Not display)	000~001	000
YCS080	(Not display)	000~003	003
YCS081	(Not display)	000~001	000
YCS082	(Not display)	000~255	000
YCS083	(Not display)	000~255	000
YCS084	(Not display)	000~007	000
YCS085	(Not display)	000~255	010
YCS086	(Not display)	000~001	001
YCS087	(Not display)	000~001	001
YCS088	(Not display)	000~001	000
YCS089	(Not display)	000~001	000
YCS090	(Not display)	000~255	136
YCS091	(Not display)	000~001	001
YCS092	(Not display)	000~001	001
YCS093	(Not display)	000~001	001
YCS094	(Not display)	000~003	000
YCS095	(Not display)	000~015	015
YCS096	(Not display)	000~015	002
YCS097	(Not display)	000~001	001
YCS098	(Not display)	000~127	007
YCS099	(Not display)	000~031	000
YCS100	(Not display)	000~001	000
YCS101	(Not display)	000~015	003
YCS102	(Not display)	000~007	002
YCS103	(Not display)	000~031	016
YCS104	(Not display)	000~255	235
YCS105	(Not display)	000~003	000
YCS106	(Not display)	000~063	000
YCS107	(Not display)	000~015	003
YCS108	(Not display)	000~015	003
YCS109	(Not display)	000~001	000
YCS110	(Not display)	000~003	001
YCS111	(Not display)	000~003	001
YCS112	(Not display)	000~003	001
YCS113	(Not display)	000~003	001
YCS114	(Not display)	000~255	000

4.6.3 [3.WHITE BALANCE]

NOTE:

Initial setting value is reference value at following condition.

INPUT SIGNAL : NTSC
ASPECT : FULL
MULTI-SCREEN : SINGLE
VIDEO STATUS : STANDARD

COLOR TEMPERATURE: LOW

Item No.	Item	Variable range	Setting value
BR	(Not display)	00000~238	000
DRV R	(Not display)	00000~255	000
DRV B	(Not display)	00000~255	000
CUT R	(Not display)	00000~255	000
CUT G	(Not display)	00000~255	000
CUT B	(Not display)	00000~255	000

4.6.4 [6.DD/CM]

Item No.	Item	Variable range	Setting value
DDT01	(Not display)	000~015	000
DDT02	(Not display)	000~255	000
DDT03	(Not display)	000~255	000
DDT04	(Not display)	000~255	255
DDT05	(Not display)	000~255	254
DDT06	(Not display)	000~255	255
DDT07	(Not display)	000~003	000
DDT08	(Not display)	000~255	032
DDT09	(Not display)	000~003	000
DDT10	(Not display)	000~255	000
DDT11	(Not display)	000~007	000
DDT12	(Not display)	000~255	115
DDT13	(Not display)	000~255	000
DDT14	(Not display)	000~003	002
DDT15	(Not display)	000~007	000
DDT16	(Not display)	000~255	187
DDT17	(Not display)	000~001	000
DDT18	(Not display)	000~001	000
DDT19	(Not display)	000~063	002
DDT20	(Not display)	000~015	014
DDT21	(Not display)	000~015	014
DDT22	(Not display)	000~015	002
DDT23	(Not display)	000~015	004
DDT24	(Not display)	000~001	000
DDT25	(Not display)	000~001	000
DDT26	(Not display)	000~001	000
DDT27	(Not display)	000~007	000
DDT28	(Not display)	000~255	127
DDT29	(Not display)	000~003	002

Item No.	Item	Variable range	Setting value
DDT30	(Not display)	000~001	000
DDT31	(Not display)	000~007	000
DDT32	(Not display)	000~255	000
DDT33	(Not display)	000~255	000
DDT34	(Not display)	000~255	033

DD 134	(Not display)	000~255	033
Item No.	Item	Variable range	Setting value
CMT01	(Not display)	000~003	000
CMT02	(Not display)	000~0FF	090
CMT03	(Not display)	000~255	015
CMT04	(Not display)	000~255	030
CMT05	(Not display)	-032~+031	-010
CMT06	(Not display)	-128~+127	000
CMT07	(Not display)	-128~+127	+010
CMT08	(Not display)	-128~+127	+005
CMT09	(Not display)	-128~+127	000
CMT10	(Not display)	000~003	000
CMT11	(Not display)	000~0FF	160
CMT12	(Not display)	000~255	020
CMT13	(Not display)	000~255	020
CMT14	(Not display)	-032~+031	-005
CMT15	(Not display)	-128~+127	+005
CMT16	(Not display)	-128~+127	000
CMT17	(Not display)	-128~+127	000
CMT18	(Not display)	-128~+127	000
CMT19	(Not display)	000~003	000
CMT20	(Not display)	000~0FF	196
CMT21	(Not display)	000~255	025
CMT22	(Not display)	000~255	055
CMT23	(Not display)	-032~+031	000
CMT24	(Not display)	-128~+127	000
CMT25	(Not display)	-128~+127	+010
CMT26	(Not display)	-128~+127	+005
CMT27	(Not display)	-128~+127	+015
CMT28	(Not display)	000~003	001
CMT29	(Not display)	000~0FF	070
CMT30	(Not display)	000~255	035
CMT31	(Not display)	000~255	040
CMT32	(Not display)	-032~+031	000
CMT33	(Not display)	-128~+127	+002
CMT34	(Not display)	-128~+127	+015
CMT35	(Not display)	-128~+127	000
CMT36	(Not display)	-128~+127	+020
CMT37	(Not display)	000~255	064
CMT38	(Not display)	000~255	066

Item No.	Item	Variable range	Setting value
CMT39	(Not display)	000~255	085
CMT40	(Not display)	-128~+127	000
CMT41	(Not display)	-128~+127	+010
CMT42	(Not display)	000~001	000
CMT43	(Not display)	000~0FF	080
CMT44	(Not display)	000~001	001
CMT45	(Not display)	000~0FF	080
CMT46	(Not display)	000~001	000
CMT47	(Not display)	000~0FF	128
CMT48	(Not display)	000~001	000
CMT49	(Not display)	000~001	001
CMT50	(Not display)	-016~+015	000
CMT51	(Not display)	-016~+015	000
CMT52	(Not display)	000~001	000
CMT53	(Not display)	000~001	000
CMT54	(Not display)	000~003	000
CMT55	(Not display)	000~001	000
CMT56	(Not display)	000~001	001
CMT57	(Not display)	000~001	000

4.6.5 [7.PANEL] (*All the values are fixed values.)

Item No.	ltem	Variable range	Setting value
PDA001	(Not display)	000~255	000
PDA002	(Not display)	000~255	000
PDA003	(Not display)	000~255	000
PDA004	(Not display)	000~255	000
PDA005	(Not display)	000~001	000
PDA006	(Not display)	000~001	000
PDA007	(Not display)	000~255	000
PDA008	(Not display)	000~255	000
PDA009	(Not display)	000~255	000
PDA010	(Not display)	000~255	000
PDA011	(Not display)	000~255	000
PDA012	(Not display)	000~127	000

4.6.6 [8.PP]

NOTE

Initial setting value is reference value at following condition.

INPUT SIGNAL : NTSC
ASPECT : FULL
MULTI-SCREEN : SINGLE
VIDEO STATUS : STANDARD
COLOR TEMPERATURE : LOW

Item No.	Item	Variable range	Setting value
ADM001	(Not display)	000~0FF	0D6
ADM002	(Not display)	000~00F	007

Item No.	Item	Variable range	Setting value
ADM003	(Not display)	000~003	001
ADM004	(Not display)	000~007	005
ADM005	(Not display)	000~01F	016
ADM006	(Not display)	000~0FF	036
ADM007	(Not display)	000~0FF	08A
ADM008	(Not display)	000~0FF	020
ADM009	(Not display)	000~0FF	0FF
ADM010	(Not display)	000~0FF	0C6
ADM011	(Not display)	000~0FF	0FF
ADM012	(Not display)	000~07F	03B
ADM013	(Not display)	000~07F	031
ADM014	(Not display)	000~07F	044
ADM015	(Not display)	000~001	001
ADM016	(Not display)	000~001	001
ADM017	(Not display)	000~001	000
ADM018	(Not display)	000~001	001
ADM019	(Not display)	000~001	000
ADM020	(Not display)	000~001	000
ADM021	(Not display)	000~001	001
ADM022	(Not display)	000~001	000
ADM023	(Not display)	000~001	000
ADM024	(Not display)	000~001	001
ADM025	(Not display)	000~001	000
ADM026	(Not display)	000~001	001
ADM027	(Not display)	000~001	001
ADM028	(Not display)	000~001	001
ADM029	(Not display)	000~001	001
ADM030	(Not display)	000~01F	003
ADM031	(Not display)	000~001	001
ADM032	(Not display)	000~001	000
ADM033	(Not display)	000~001	001
ADM034	(Not display)	000~0FF	032

Item No.	Item	Variable range	Setting value
PPA001	(Not display)	000~255	040
PPA002	(Not display)	000~255	000
PPA003	(Not display)	000~255	05A
PPA004	(Not display)	000~255	000
PPA005	(Not display)	000~255	000
PPA006	(Not display)	000~255	001
PPA007	(Not display)	000~255	05A
PPA008	(Not display)	000~255	023

Item No.	Item	Variable range	Setting value
PPB001	(Not display)	000~031	000

Item No.	Item	Variable range	Setting value
PPB002	(Not display)	000~255	000
PPB003	(Not display)	000~255	000
PPB004	(Not display)	000~031	000
PPB005	(Not display)	000~255	000
PPB006	(Not display)	000~255	000
PPB007	(Not display)	000~031	000
PPB008	(Not display)	000~255	000
PPB009	(Not display)	000~255	000
PPB010	(Not display)	000~031	000
PPB011	(Not display)	000~255	000
PPB012	(Not display)	000~255	000
PPB013	(Not display)	000~031	000
PPB014	(Not display)	000~255	000
PPB015	(Not display)	000~255	000
PPB016	(Not display)	000~031	000
PPB017	(Not display)	000~255	000
PPB018	(Not display)	000~255	000
PPB019	(Not display)	000~031	000
PPB020	(Not display)	000~255	000
PPB021	(Not display)	000~255	000
PPB022	(Not display)	000~031	000
PPB023	(Not display)	000~255	000
PPB024	(Not display)	000~255	000
PPB025	(Not display)	000~031	000
PPB026	(Not display)	000~255	000
PPB027	(Not display)	000~255	000
PPB028	(Not display)	000~031	000
PPB029	(Not display)	000~255	000
PPB030	(Not display)	000~255	000
PPB031	(Not display)	000~031	000
PPB032	(Not display)	000~255	000
PPB033	(Not display)	000~255	000
PPB034	(Not display)	000~031	000
PPB035	(Not display)	000~255	000
PPB036	(Not display)	000~255	000

Item No.	Item	Variable range	Setting value
PPC001	(Not display)	000~255	000
PPC002	(Not display)	000~255	00E
PPC003	(Not display)	000~255	002
PPC004	(Not display)	000~001	000
PPC005	(Not display)	000~001	000
PPC006	(Not display)	000~001	000
PPC007	(Not display)	000~001	000
PPC008	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
PPC007	(Not display)	000~001	01C
PPC008	(Not display)	000~001	004

Item No.	Item	Variable range	Setting value
PPD001	(Not display)	000~255	800
PPD002	(Not display)	000~255	000
PPD003	(Not display)	000~255	019
PPD004	(Not display)	000~255	001
PPD005	(Not display)	000~255	09A
PPD006	(Not display)	000~255	000
PPD007	(Not display)	000~255	019
PPD008	(Not display)	000~255	001
PPD009	(Not display)	000~255	0B3
PPD010	(Not display)	000~255	000
PPD011	(Not display)	000~255	024
PPD012	(Not display)	000~255	001
PPD013	(Not display)	000~255	039
PPD014	(Not display)	000~255	000
PPD015	(Not display)	000~255	096
PPD016	(Not display)	000~255	001
PPD017	(Not display)	000~255	086
PPD018	(Not display)	000~255	000
PPD019	(Not display)	000~255	024
PPD020	(Not display)	000~255	001
PPD021	(Not display)	000~255	050
PPD022	(Not display)	000~255	000
PPD023	(Not display)	000~255	0AA
PPD024	(Not display)	000~255	001
PPD025	(Not display)	000~255	072

4.6.7 [9.IP] (*All the values are fixed values.)

NOTE:

Initial setting value is reference value at following condition.

INPUT SIGNAL : NTSC
ASPECT : FULL
MULTI-SCREEN : SINGLE
VIDEO STATUS : STANDARD

COLOR TEMPERATURE: LOW

Item No.	Item	Variable range	Setting value
IPA001	(Not display)	000~001	001
IPA002	(Not display)	000~063	015
IPA003	(Not display)	000~063	010
IPA004	(Not display)	000~063	015
IPA005	(Not display)	000~003	001
IPA006	(Not display)	000~003	001
IPA007	(Not display)	000~015	00F

Item No.	Item	Variable range	Setting value
IPA008	(Not display)	000~063	005
IPA009	(Not display)	000~063	000
IPA010	(Not display)	000~063	01F
IPA011	(Not display)	000~063	01F
IPA012	(Not display)	000~063	02F
IPA013	(Not display)	000~003	000
IPA014	(Not display)	000~003	000
IPA015	(Not display)	000~063	00F
IPA016	(Not display)	000~063	005
IPA017	(Not display)	000~001	001
IPA018	(Not display)	000~063	029
IPA019	(Not display)	000~001	001
IPA020	(Not display)	000~001	001
IPA021	(Not display)	000~063	015
IPA022	(Not display)	000~003	000
IPA023	(Not display)	000~063	004
IPA024	(Not display)	000~001	001
IPA025	(Not display)	000~001	001
IPA026	(Not display)	000~063	015
IPA027	(Not display)	000~003	000
IPA028	(Not display)	000~063	005
IPA029	(Not display)	000~063	000
IPA030	(Not display)	000~015	000
IPA031	(Not display)	000~007	000
IPA032	(Not display)	000~063	000
IPA033	(Not display)	000~001	000
IPA034	(Not display)	000~063	000
IPA035	(Not display)	000~001	001
IPA036	(Not display)	000~063	00D
IPA037	(Not display)	000~063	00D
IPA038	(Not display)	000~063	010
IPA039	(Not display)	000~003	001
IPA040	(Not display)	000~003	001
IPA041	(Not display)	000~015	00F
IPA042	(Not display)	000~063	005
IPA043	(Not display)	000~063	005
IPA044	(Not display)	000~063	00C
IPA045	(Not display)	000~063	00C
IPA046	(Not display)	000~063	00F
IPA047	(Not display)	000~003	001
IPA048	(Not display)	000~003	001 00F
IPA049	(Not display)	000~015	
IPA050	(Not display)	000~063	008
IPA051	(Not display)	000~001	001
IPA052	(Not display)	000~063	800

Item No.	Item	Variable range	Setting value
IPA053	(Not display)	000~001	001
IPA054	(Not display)	000~001	001
IPA055	(Not display)	000~063	025
IPA056	(Not display)	000~003	000
IPA057	(Not display)	000~063	00A
IPA058	(Not display)	000~001	001
IPA059	(Not display)	000~001	001
IPA060	(Not display)	000~063	025
IPA061	(Not display)	000~003	000
IPA062	(Not display)	000~063	00A
IPA063	(Not display)	000~063	000
IPA064	(Not display)	000~015	000
IPA065	(Not display)	000~007	000
IPA066	(Not display)	000~063	000
IPA067	(Not display)	000~001	000
IPA068	(Not display)	000~063	000
IPA069	(Not display)	000~003	000
IPA070	(Not display)	000~255	000
IPA071	(Not display)	000~015	005
IPA072	(Not display)	000~255	0DC
IPA073	(Not display)	000~001	000
IPA074	(Not display)	000~001	000
IPA075	(Not display)	000~255	016
IPA076	(Not display)	000~001	000
IPA077	(Not display)	000~001	000
IPA078	(Not display)	000~001	000
IPA079	(Not display)	000~001	000
IPA080	(Not display)	000~001	000
IPA081	(Not display)	000~001	000
IPA082	(Not display)	000~001	000
IPA083	(Not display)	000~001	000
IPA084	(Not display)	000~001	000
IPA085	(Not display)	000~001	000
IPA086	(Not display)	000~001	000
IPA087	(Not display)	000~001	000
IPA088	(Not display)	000~001	000
IPA089	(Not display)	000~001	000
IPA090	(Not display)	000~001	000
IPA091	(Not display)	000~015	000
IPA092	(Not display)	000~255	000
IPA093	(Not display)	000~015	003
IPA094	(Not display)	000~255	0FF
IPA095	(Not display)	000~015	000
IPA096	(Not display)	000~255	000
IPA097	(Not display)	000~015	005

Item No.	Item	Variable range	Setting value
IPA098	(Not display)	000~255	0D3
IPA099	(Not display)	000~015	000
IPA100	(Not display)	000~255	000
IPA101	(Not display)	000~015	000
IPA102	(Not display)	000~255	000
IPA103	(Not display)	000~015	000
IPA104	(Not display)	000~255	000
IPA105	(Not display)	000~015	000
IPA106	(Not display)	000~255	000
IPA107	(Not display)	000~015	000
IPA108	(Not display)	000~255	080
IPA109	(Not display)	000~015	000
IPA110	(Not display)	000~255	040
IPA111	(Not display)	000~015	005
IPA112	(Not display)	000~255	040
IPA113	(Not display)	000~015	000
IPA114	(Not display)	000~255	0C0
IPA115	(Not display)	000~015	002
IPA116	(Not display)	000~255	0EF
IPA117	(Not display)	000~001	000
IPA118	(Not display)	000~001	000
IPA119	(Not display)	000~001	000
IPA120	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
IPB001	(Not display)	000~255	001
IPB002	(Not display)	000~255	00F
IPB003	(Not display)	000~015	000
IPB004	(Not display)	000~255	0B7
IPB005	(Not display)	000~015	002
IPB006	(Not display)	000~255	0C9
IPB007	(Not display)	000~015	002
IPB008	(Not display)	000~255	038
IPB009	(Not display)	000~015	001
IPB010	(Not display)	000~255	0AB
IPB011	(Not display)	000~015	001
IPB012	(Not display)	000~255	01C
IPB013	(Not display)	000~015	000
IPB014	(Not display)	000~255	08E
IPB015	(Not display)	000~015	000
IPB016	(Not display)	000~255	01D
IPB017	(Not display)	000~015	000
IPB018	(Not display)	000~255	01E
IPB019	(Not display)	000~015	000
IPB020	(Not display)	000~255	023

Item No.	Item	Variable range	Setting value
IPB021	(Not display)	000~015	000
IPB022	(Not display)	000~255	03E
IPB023	(Not display)	000~015	001
IPB024	(Not display)	000~255	07B
IPB025	(Not display)	000~015	000
IPB026	(Not display)	000~255	000
IPB027	(Not display)	000~015	004
IPB028	(Not display)	000~255	037
IPB029	(Not display)	000~015	000
IPB030	(Not display)	000~255	04C
IPB031	(Not display)	000~015	000
IPB032	(Not display)	000~255	000
IPB033	(Not display)	000~015	000
IPB034	(Not display)	000~255	000
IPB035	(Not display)	000~015	001
IPB036	(Not display)	000~255	02E
IPB037	(Not display)	000~001	000
IPB038	(Not display)	000~007	000
IPB039	(Not display)	000~015	000
IPB040	(Not display)	000~015	00F
IPB041	(Not display)	000~015	006
IPB042	(Not display)	000~255	000
IPB043	(Not display)	000~015	002
IPB044	(Not display)	000~255	038
IPB045	(Not display)	000~015	003
IPB046	(Not display)	000~255	000
IPB047	(Not display)	000~015	000
IPB048	(Not display)	000~255	0CA
IPB049	(Not display)	000~015	000
IPB050	(Not display)	000~255	0D0
IPB051	(Not display)	000~015	000
IPB052	(Not display)	000~255	000
IPB053	(Not display)	000~015	000
IPB054	(Not display)	000~255	000
IPB055	(Not display)	000~015	000
IPB056	(Not display)	000~255	0C4
IPB057	(Not display)	000~015	006
IPB058	(Not display)	000~255	040
IPB059	(Not display)	000~007	001
IPB060	(Not display)	000~003	000
IPB061	(Not display)	000~003	000
IPB062	(Not display)	000~001	000
IPB063	(Not display)	000~255	000
IPB064	(Not display)	000~255	080
IPB065	(Not display)	000~255	080

Item No.	Item	Variable range	Setting value
IPB066	(Not display)	000~001	000
IPB067	(Not display)	000~015	000
IPB068	(Not display)	000~015	000
IPB069	(Not display)	000~015	000
IPB070	(Not display)	000~015	00F
IPB071	(Not display)	000~255	000
IPB072	(Not display)	000~015	000
IPB073	(Not display)	000~255	000
IPB074	(Not display)	000~001	000
IPB075	(Not display)	000~001	000
IPB076	(Not display)	000~001	000
IPB077	(Not display)	000~015	009
IPB078	(Not display)	000~001	001
IPB079	(Not display)	000~255	042

Item No.	Item	Variable range	Setting value
IPC001	(Not display)	000~003	002
IPC002	(Not display)	000~255	0EA
IPC003	(Not display)	000~001	000
IPC004	(Not display)	000~001	000
IPC005	(Not display)	000~015	000
IPC006	(Not display)	000~255	000
IPC007	(Not display)	000~015	005
IPC008	(Not display)	000~255	0DB
IPC009	(Not display)	000~015	006
IPC010	(Not display)	000~255	071
IPC011	(Not display)	000~015	000
IPC012	(Not display)	000~255	000
IPC013	(Not display)	000~003	001
IPC014	(Not display)	000~001	000
IPC015	(Not display)	000~001	001
IPC016	(Not display)	000~255	0EE
IPC017	(Not display)	000~001	000
IPC018	(Not display)	000~127	000
IPC019	(Not display)	000~001	000
IPC020	(Not display)	000~127	000
IPC021	(Not display)	000~015	001
IPC022	(Not display)	000~255	03F
IPC023	(Not display)	000~003	002
IPC024	(Not display)	000~255	01E
IPC025	(Not display)	000~001	000
IPC026	(Not display)	000~127	00F
IPC027	(Not display)	000~001	000
IPC028	(Not display)	000~127	000
IPC029	(Not display)	000~001	001

Item No.	Item	Variable range	Setting value
IPC030	(Not display)	000~001	000
IPC031	(Not display)	000~001	000
IPC032	(Not display)	000~001	000
IPC033	(Not display)	000~001	001
IPC034	(Not display)	000~001	001
IPC035	(Not display)	000~001	000
IPC036	(Not display)	000~001	000
IPC037	(Not display)	000~001	000
IPC038	(Not display)	000~001	000
IPC039	(Not display)	000~001	000
IPC040	(Not display)	000~001	000
IPC041	(Not display)	000~001	000
IPC042	(Not display)	000~001	000
IPC043	(Not display)	000~001	000
IPC044	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
IPD001	(Not display)	000~255	040
IPD002	(Not display)	000~255	000
IPD003	(Not display)	000~255	000
IPD004	(Not display)	000~007	000
IPD005	(Not display)	000~255	01C
IPD006	(Not display)	000~007	000
IPD007	(Not display)	000~255	0E1
IPD008	(Not display)	000~001	000
IPD009	(Not display)	000~015	000
IPD010	(Not display)	000~255	012
IPD011	(Not display)	000~015	004
IPD012	(Not display)	000~255	0BB
IPD013	(Not display)	000~007	000
IPD014	(Not display)	000~007	000
IPD015	(Not display)	000~001	000
IPD016	(Not display)	000~001	000
IPD017	(Not display)	000~255	000
IPD018	(Not display)	000~007	000
IPD019	(Not display)	000~255	01D
IPD020	(Not display)	000~007	002
IPD021	(Not display)	000~255	0E6
IPD022	(Not display)	000~001	001
IPD023	(Not display)	000~015	001
IPD024	(Not display)	000~255	00E
IPD025	(Not display)	000~015	004
IPD026	(Not display)	000~255	0C0

Item No.	Item	Variable range	Setting value
IPE001	(Not display)	000~255	001
IPE002	(Not display)	000~255	002
IPE003	(Not display)	000~255	001
IPE004	(Not display)	000~255	002
IPE005	(Not display)	000~255	001
IPE006	(Not display)	000~255	002
IPE007	(Not display)	000~255	001
IPE008	(Not display)	000~255	002
IPE009	(Not display)	-128~+127	+005
IPE010	(Not display)	-128~+127	+006
IPE011	(Not display)	-128~+127	+005
IPE012	(Not display)	-128~+127	-005
IPE013	(Not display)	-128~+127	+0FB
IPE014	(Not display)	-128~+127	+005
IPE015	(Not display)	000~015	001

4.6.8 [0.HDMI] *All the values are fixed values.

Item No.	Item	Variable range	Setting value
HDM001	(Not display)	000~001	000
HDM002	(Not display)	000~001	000
HDM003	(Not display)	000~001	000
HDM004	(Not display)	000~001	000
HDM005	(Not display)	000~001	000
HDM006	(Not display)	000~003	000
HDM007	(Not display)	000~001	000
HDM008	(Not display)	000~001	000
HDM009	(Not display)	000~001	000
HDM010	(Not display)	000~001	000
HDM011	(Not display)	000~001	000
HDM012	(Not display)	000~001	000
HDM013	(Not display)	000~001	000
HDM014	(Not display)	000~001	000
HDM015	(Not display)	000~001	000
HDM016	(Not display)	000~255	000
HDM017	(Not display)	000~255	000
HDM018	(Not display)	000~255	000
HDM019	(Not display)	000~001	000
HDM020	(Not display)	000~255	000
HDM021	(Not display)	000~007	000
HDM022	(Not display)	000~063	000
HDM023	(Not display)	000~063	000
HDM024	(Not display)	000~063	000
HDM025	(Not display)	000~001	000
HDM026	(Not display)	000~003	000
HDM027	(Not display)	000~255	000

Item No.	Item	Variable range	Setting value
HDM028	(Not display)	000~003	000
HDM029	(Not display)	000~255	000
HDM030	(Not display)	000~003	000
HDM031	(Not display)	000~255	000
HDM032	(Not display)	000~003	000
HDM033	(Not display)	000~255	000
HDM034	(Not display)	000~003	000
HDM035	(Not display)	000~255	000
HDM036	(Not display)	000~255	000
HDM037	(Not display)	000~255	000
HDM038	(Not display)	000~255	000
HDM039	(Not display)	000~001	000
HDM040	(Not display)	000~001	000
HDM041	(Not display)	000~001	000
HDM042	(Not display)	000~255	000
HDM043	(Not display)	000~007	000
HDM044	(Not display)	000~003	000
HDM045	(Not display)	000~003	000
HDM046	(Not display)	000~001	000
HDM047	(Not display)	000~015	000
HDM048	(Not display)	000~255	000
HDM049	(Not display)	000~255	000
HDM050	(Not display)	000~015	000
HDM051	(Not display)	000~001	000
HDM052	(Not display)	000~001	000
HDM053	(Not display)	000~001	000
HDM054	(Not display)	000~001	000
HDM055	(Not display)	000~001	000
HDM056	(Not display)	000~001	000
HDM057	(Not display)	000~001	000
HDM058	(Not display)	000~001	000
HDM059	(Not display)	000~001	000
HDM060	(Not display)	000~001	000
HDM061	(Not display)	000~001	000
HDM062	(Not display)	000~001	000
HDM063	(Not display)	000~001	000
HDM064	(Not display)	000~001	000
HDM065	(Not display)	000~001	000
HDM066	(Not display)	000~001	000
HDM067	(Not display)	000~001	000
HDM068	(Not display)	000~031	000
HDM069	(Not display)	000~001	000
HDM070	(Not display)	000~001	000
HDM071	(Not display)	000~001	000
HDM072	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
HDM073	(Not display)	000~001	000
HDM074	(Not display)	000~031	000
HDM075	(Not display)	000~001	000
HDM076	(Not display)	000~001	000
HDM077	(Not display)	000~001	000
HDM078	(Not display)	000~001	000
HDM079	(Not display)	000~001	000
HDM080	(Not display)	000~001	000

Item No.	Item	Variable range	Setting value
RHD001	(Not display)		000
RHD002	(Not display)		000
RHD003	(Not display)		000
RHD004	(Not display)		000
RHD005	(Not display)		000
RHD006	(Not display)		000
RHD007	(Not display)		000
RHD008	(Not display)		000
RHD009	(Not display)		000
RHD010	(Not display)		000
RHD011	(Not display)		000
RHD012	(Not display)		000
RHD013	(Not display)		000
RHD014	(Not display)		000
RHD015	(Not display)		000
RHD016	(Not display)		000
RHD017	(Not display)		000
RHD018	(Not display)		000
RHD019	(Not display)		000
RHD020	(Not display)		000
RHD021	(Not display)		000
RHD022	(Not display)		000
RHD023	(Not display)		000
RHD024	(Not display)		000
RHD025	(Not display)		000
RHD026	(Not display)		000
RHD027	(Not display)		000
RHD028	(Not display)		000
RHD029	(Not display)		000
RHD030	(Not display)		000
RHD031	(Not display)		000
RHD032	(Not display)		000
RHD033	(Not display)		000
RHD034	(Not display)		000
RHD035	(Not display)		000

Item No.	Item	Variable range	Setting value
RHD036	(Not display)		000
RHD037	(Not display)		000
RHD038	(Not display)		000
RHD039	(Not display)		000
RHD040	(Not display)		000
RHD041	(Not display)		000
RHD042	(Not display)		000
RHD043	(Not display)		000
RHD044	(Not display)		000
RHD045	(Not display)		000
RHD046	(Not display)		000
RHD047	(Not display)		000
RHD048	(Not display)		000
RHD049	(Not display)		000
RHD050	(Not display)		000
RHD051	(Not display)		000
RHD052	(Not display)		000
RHD053	(Not display)		000
RHD054	(Not display)		000
RHD055	(Not display)		000
RHD056	(Not display)		000
RHD057	(Not display)		000
RHD058	(Not display)		000
RHD059	(Not display)		000
RHD060	(Not display)		000
RHD061	(Not display)		000
RHD062	(Not display)		000
RHD063	(Not display)		000
RHD064	(Not display)		000
RHD065	(Not display)		000
RHD066	(Not display)		000
RHD067	(Not display)		000
RHD068	(Not display)		000
RHD069	(Not display)		000
RHD070	(Not display)		000
RHD071	(Not display)		000
RHD072	(Not display)		000
RHD073	(Not display)		000
RHD074	(Not display)		000
RHD075	(Not display)		000
RHD076	(Not display)		000
RHD077	(Not display)		000
RHD078	(Not display)		000
RHD079	(Not display)		000
RHD080	(Not display)		000

Item No.	Item	Variable range	Setting value
RHD081	(Not display)		000
RHD082	(Not display)		000
RHD083	(Not display)		000
RHD084	(Not display)		000
RHD085	(Not display)		000
RHD086	(Not display)		000
RHD087	(Not display)		000
RHD088	(Not display)		000
RHD089	(Not display)		000
RHD090	(Not display)		000
RHD091	(Not display)		000
RHD092	(Not display)		000
RHD093	(Not display)		000
RHD094	(Not display)		000
RHD095	(Not display)		000
RHD096	(Not display)		000
RHD097	(Not display)		000
RHD098	(Not display)		000
RHD009	(Not display)		000
RHD100	(Not display)		000
RHD101	(Not display)		000
RHD102	(Not display)		000
RHD103	(Not display)		000
RHD104	(Not display)		000
RHD105	(Not display)		000
RHD106	(Not display)		000
RHD107	(Not display)		000
RHD108	(Not display)		000
RHD109	(Not display)		000
RHD110	(Not display)		000
RHD111	(Not display)		000
RHD112	(Not display)		000
RHD113	(Not display)		000
RHD114	(Not display)		000
RHD115	(Not display)		000
RHD116	(Not display)		000
RHD117	(Not display)		000
RHD118	(Not display)		000
RHD119	(Not display)		000
RHD120 RHD121	(Not display)		000
RHD121 RHD122	(Not display)		000
RHD122 RHD123	(Not display) (Not display)		000
RHD124	(Not display)		000
RHD125	(Not display)		000
111111111111111111111111111111111111111	(110t display)		000

Item No.	Item	Variable range	Setting value
RHD126	(Not display)		000
RHD127	(Not display)		000
RHD128	(Not display)		000
RHD129	(Not display)		000
RHD130	(Not display)		000
RHD131	(Not display)		000
RHD132	(Not display)		000
RHD133	(Not display)		000
RHD134	(Not display)		000
RHD135	(Not display)		000
RHD136	(Not display)		000
RHD137	(Not display)		000
RHD138	(Not display)		000
RHD139	(Not display)		000
RHD140	(Not display)		000
RHD141	(Not display)		000
RHD142	(Not display)		000
RHD143	(Not display)		000
RHD144	(Not display)		000
RHD145	(Not display)		000
RHD146	(Not display)		000
RHD147	(Not display)		000
RHD148	(Not display)		000
RHD149	(Not display)		000
RHD150	(Not display)		000
RHD151	(Not display)		000
RHD152	(Not display)		000
RHD153	(Not display)		000
RHD154	(Not display)		000
RHD155	(Not display)		000
RHD156	(Not display)		000
RHD157	(Not display)		000
RHD158	(Not display)		000
RHD159	(Not display)		000
RHD160	(Not display)		000
RHD161	(Not display)		000
RHD162	(Not display)		000
RHD163	(Not display)		000
RHD164	(Not display)		000
RHD165	(Not display)		000
RHD166	(Not display)		000
RHD167	(Not display)		000
RHD168	(Not display)		000
RHD169	(Not display)		000
RHD170	(Not display)		000

4.7 ADJUSTMENT PROCEDURE

4.7.1 SETTING BEFORE ADJUSTMENT

(1) Check the following settings before adjustment.

Item	setting value	contents
S19	128	R CUT OFF
S21	128	G CUT OFF
S23	128	B CUT OFF

(2) Take note of initial values in the following table before adjustment. Then, set the values to adjustment setting values shown in the following table. After adjustment procedure, return the values to the initial values you have taken note of (except white balance adjustment).

The values can be set for each input signal (NTSC etc.), but the values are basically the same among the input signals. Since the values are not adjusted for 525p/720p (because the values change according to the reference adjustment values), you do not have to take note of the values if unnecessary.

Item	Initial value NTSC	Initial value 525p	Initial value 1125i	Initial value 750p	setting value	contents
S13					255	R DRIVE
S15					255	G DRIVE
S17					255	B DRIVE

(3) Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit:

Setting item	Settings
VIDEO STATUS	STANDARD
BRIGHT / CONTRAST / COLOR / TINT	00
COLOR TEMPERATURE	LOW
DIG. NOISE CLEAR	OFF
COLOR MANEGMENT	STANDARD
NATURAL CINEMA	OFF
TREBLE / BASS / BALANCE	00
BBE	OFF
A.H.S	OFF
A.H.B	OFF
ASPECT	FULL

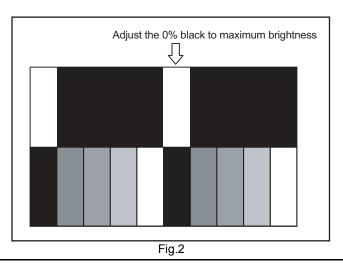
NOTE:

Follow the order instructed in adjustment procedure.

4.7.2 VIDEO CIRCUIT

Item	Mesuring instrument	Test point	Adjustment part	
COMPONENT	Remote control		[8.PP]	(1) ln
INPUT BLACK	unit		ADM013: (NO DISPLAY)	w
LEVEL			(G offset)	(2) S
	Signal generator			(3) S
			[1. PICTURE/SOUND]	(4) S
			S13: RDRV (R DRIVE)	(5) Se
			S15: GDRV (G DRIVE)	М
			S17: BDRV (B DRIVE)	(6) S
			S19: CUTR (R CUTOFF)	(F
			S21: CUTG (G CUTOFF)	M
			S23: CUTB (B CUTOFF)	(7) S
				(N
			F44: (NO DISPLAY)	(N
			(Picture control)	sł
			F45: (NO DISPLAY)	(8) Pı
			(Picture control mode sw)	(9) S
			F46: OUT LV.	(10) A
			(Output level upon	pa
			detection)	bı
			F47: LMT BTM	(11) A
			(Minimum value upon	0
			detection)	(12) Pi
			F48: LMT TOP	(13) S
			(Maximum value upon	M
			detection)	(14) C
	<u> </u>	1	ı	it

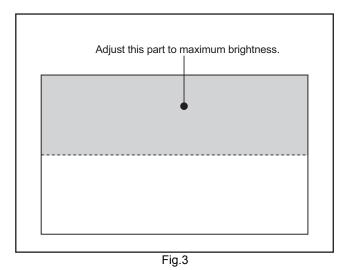
Item No.	Setting value	Adjustment item
F46	090	Output level upon detection
F47	016	Minimum value upon detection
F48	016	Maximum value upon detection



(1) Input 525i signal that shows brightness gradation with 0% black into a component input terminal.

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (6) Set < F44 > (Picture control) to "001" and < F45 > (Picture control mode sw) to "000" to set Y ADJUST MAX MODE.
- (7) Set < F46 > (Output level upon detection),< F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (8) Press the [MUTING] key to memoirze the set value.
- (9) Select "8.PP" from the SERVICE MODE.
- (10) Adjust < ADM013 > (G OFFSET) to set the 0% black part on the upper half of the screen to maximum brightness. (Fig.2)
- (11) Add reference offset value "0" to the < ADM013 > (G OFFSET) value.
- (12) Press the [MUTING] key to memoirze the set value.
- Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (14) Check the black level. Adjust the black level again if it is not proper.
- (15) Set < F44 > (Picture control) to "001" to cancel Y ADJUST MAX MODE.
- (16) Press the [MUTING] key to memoirze the set value.
- (17) Input 1125i signal.
- (18) Repeat steps (5) to (15) above.
- (19) Press the [MUTING] key to memoirze the set value.

Item No.	Setting value	Adjustment item
F46	090	Output level upon detection
F47	220	Minimum value upon detection
F48	220	Maximum value upon detection

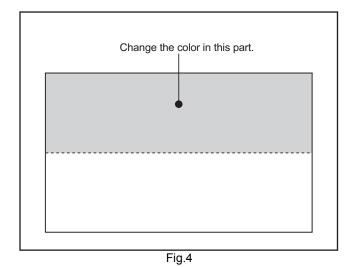


(1) Input 525i 100% all-white signal into a component input terminal.

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (6) Set < F44 > (Picture control) to "001" and < F45 > (Picture control mode sw) to "000" to set Y ADJUST MAX MODE.
- (7) Set < F46 > (Output level upon detection), < F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (8) Press the [MUTING] key to memoirze the set value.
- (9) Select "8.PP" from the SERVICE MODE.
- (10) Adjust < ADM010 > (G GAIN) to set the upper half of the screen to maximum brightness. (Fig.3)
- (11) Press the [MUTING] key to memoirze the set value.
- (12) Check the black level. Perform the "BLACK LEVEL Adjustment" again if the adjusted value is not proper.
- (13) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (14) Set < F44 > (Picture control) to "000" to cancel Y ADJUST MAX MODE.
- (15) Press the [MUTING] key to memoirze the set value.
- (16) Input 1125i signal.
- (17) Repeat steps (5) to (14) above.
- (18) Press the [MUTING] key to memoirze the set value.

Item	Mesuring instrument	Test point	Adjustment part
COMPONENT INPUT A-D CONVERTER OFFSET	Remote control unit Signal generator		[8.PP] ADM012: (NO DISPLAY) (R OFFSET) ADM014: (NO DISPLAY) (B OFFSET) [1. PICTURE/SOUND] S13: RDRV (R DRIVE) S15: GDRV (G DRIVE) S17: BDRV (B DRIVE) S19: CUTR (R CUTOFF) S21: CUTG (G CUTOFF) S23: CUTB (B CUTOFF) F44: (NO DISPLAY) (Picture control) F45: (NO DISPLAY) (Picture control mode sw) F46: OUT LV. (Output level upon detection) F47: LMT BTM (Minimum value upon detection) F48: LMT TOP (Maximum value upon
			detection)

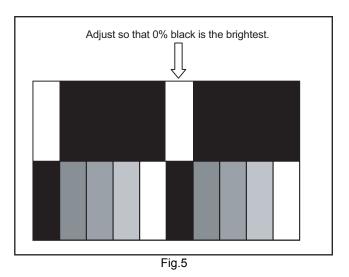
Item No.	Setting value	Adjustment item
F46	090	Output level upon detection
F47	000	Minimum value upon detection
F48	000	Maximum value upon detection



(1) Input	525i	component	30%	all-white	signal	into	а
comp	onen	t input termir	nal.				

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (6) Set < F44 > (Picture control) to "001" and < F45 > (Picture control mode sw) to "003" to set the chrominance adjustment zero mode.
- (7) Set < F46 > (Output level upon detection), < F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (8) Press the [MUTING] key to memoirze the set value.
- (9) Select "8.PP" from the SERVICE MODE.
- (10) Change the value of < ADM014 > (B OFFSET) from the initial value in the range of ±5 to set the upper half of the screen magenta.
- (11) Adjust < ADM012 > (R OFFSET) to change the upper half of the screen from magenta to blue.
- (12) Take a note of the value of < ADM012 > (R OFFSET) adjusted in (11).
- (13) Change the value of < ADM012 > (R OFFSET) from the value that you have taken note of in the range of ±5 to set the upper half of the screen magenta.
- (14) Adjust < ADM014 > (B OFFSET) to change the upper half of the screen from magenta to red.
- (15) Return the value of < ADM012 > (R OFFSET) to the value that you have taken note of in (12).
- (16) Press the [MUTING] key to memoirze the set value.
- (17) Set the SPLIT screen mode.
- (18) Input monochrome signal such as cross hatch both to the right and the left screen.
- (19) Set < ADM012 > (R OFFSET) and < ADM014 > (B OFFSET) to the same values as in single-screen mode.
- (20) Press the [MUTING] key to memoirze the set value.
- (21) Set < F44 > (Picture control) to "000" to cancel the chrominance adjustment zero mode.
- (22) Input 1125i 30% all-white signal.
- (23) Repeat steps (5) to (21) above.
- (24) Press the [MUTING] key to memoirze the set value.

Item No.	Setting value	Adjustment item	
F46	090	Output level upon detection	
F47	016	Minimum value upon detection	
F48	016	Maximum value upon detection	

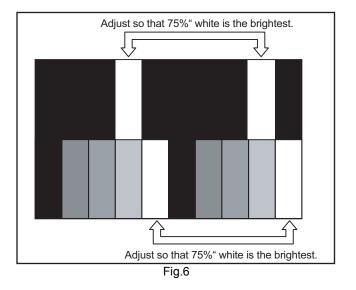


(1) lı	nput NTSC	signal th	nat shows	brightness	gradation
V	vith 0% blac	k.			

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (6) Set < F44 > (Picture control) to "001" and < F45 > (Picture control mode sw) to "000" to set Y ADJUST MAX MODE.
- (7) Set < F46 > (Output level upon detection), < F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (8) Select "2. YC SEP" from the SERVICE MODE.
- (9) Adjust < YCM131 > (BRIGHTNESS) so that 0% part of gradation is the brightest. (Fig. 6)
- (10) Press the [MUTING] key to memoirze the set value.
- (11) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (12) Set < F44 > (Picture control) to "000" to cancel Y ADJUST MAX MODE.
- (13) Press the [MUTING] key to memoirze the set value.

Item	Mesuring instrument	Test point	Adjustment part
COMPOSITE INPUT A-D CONVERTER OFFSET	Remote control unit Signal generator		[2. YC SEP] YCM132: (NO DISPLAY) (CONTRAST) [1. PICTURE/SOUND] S13: RDRV (R DRIVE) S15: GDRV (G DRIVE) S17: BDRV (B DRIVE) S19: CUTR (R CUTOFF) S21: CUTG (G CUTOFF) S23: CUTB (B CUTOFF) F44: (NO DISPLAY) (Picture control) F45: (NO DISPLAY) (Picture control mode sw) F46: OUT LV. (Output level upon detection) F47: LMT BTM (Minimum value upon detection) F48: LMT TOP (Maximum value upon
			detection)

Item No.	Setting value	Adjustment item	
F46	090	Output level upon detection	
F47	165	Minimum value upon detection	
F48	165	Maximum value upon detection	

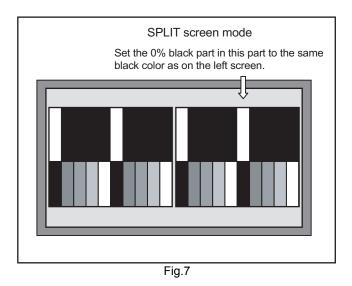


(1) Input a signal that shows brightness gradation with 75% white.

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (6) Set < F44 > (Picture control) to "001" and <F45 > (Picture control mode sw) to "000" to set Y ADJUST MAX MODE.
- (7) Set < F46 > (Output level upon detection), < F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (8) Select "2.YC SEP" from the SERVICE MODE.
- (9) Adjust < YCM132 > (CONTRAST) so that the 75% white of gradation is white. (Fig.7)
- (10) Press the [MUTING] key to memoirze the set value.
- (11) Check the black level adjusted in composite input black level adjustment. Perform the "Composite input black level Adjustment" again if the adjusted value is not proper.
- (12) Perform (9) and (10) if you readjust the black level in (11).
- (13) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (14) Set < F44 > (Picture control) to "000" to cancel Y ADJUST MAX MODE.
- (15) Press the [MUTING] key to memoirze the set value.

Item	Mesuring instrument	Test point	Adjustment part
SUB-SCREEN BLACK LEVEL	Remote control unit Signal generator		[8. PP] ADM013: (NO DISPLAY) (G offset) [1. PICTURE/SOUND] S13: RDRV (R DRIVE) S15: GDRV (G DRIVE) S17: BDRV (B DRIVE) S19: CUTR (R CUTOFF) S21: CUTG (G CUTOFF) S23: CUTB (B CUTOFF) F44: (NO DISPLAY) (Picture control) F45: (NO DISPLAY) (Picture control mode sw) F46: OUT LV. (Output level upon detection) F47: LMT BTM (Minimum value upon detection) F48: LMT TOP (Maximum value upon detection)

Item No.	Setting value	Adjustment item		
F46	090	Output level upon detection		
F47	016	Minimum value upon detection		
F48	016	Maximum value upon detection		

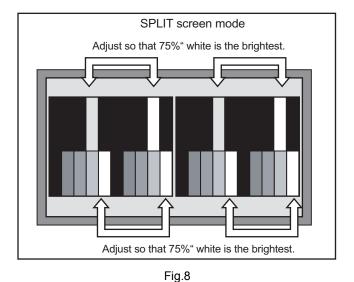


(1) Input NTSC signal that shows brightness gradation with 0% black into both the right and the left screen.

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Set SPLIT screen mode.
- (6) Select "1.PICTURE/SOUND" from the SERVICE MODE for the right screen.
- (7) Set < F44 > (Picture control) to "001" and <F45 > (Picture control mode sw) to "000" to set Y ADJUST MAX MODE.
- (8) Set < F46 > (Output level upon detection), < F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (9) Press the [MUTING] key to memoirze the set value.
- (10) Select "8.PP" from the SERVICE MODE.
- (11) Adjust < ADM013 > (G OFFSET) to set the 0% black part on the upper right half of the screen to the same color as on the upper left half of the screen. (Fig.9)
- (12) Press the [MUTING] key to memoirze the set value.
- (13) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (14) Set < F44 > (Picture control) to "000" to cancel Y ADJUST MAX MODE
- (15) Press the [MUTING] key to memoirze the set value.

Item	Mesuring instrument	Test point	Adjustment part
SUB-SCREEN A-D CONVERTER GAIN	Remote control unit Signal generator		[8. PP] ADM010: (NO DISPLAY) (G GAIN) [1. PICTURE/SOUND] S13: RDRV (R DRIVE) S15: GDRV (G DRIVE) S17: BDRV (B DRIVE) S19: CUTR (R CUTOFF) S21: CUTG (G CUTOFF) S23: CUTB (B CUTOFF) F44: (NO DISPLAY) (Picture control) F45: (NO DISPLAY) (Picture control mode sw) F46: OUT LV. (Output level upon detection) F47: LMT BTM (Minimum value upon detection) F48: LMT TOP (Maximum value upon detection)

Item No.	Setting value	Adjustment item	
F46	090	Output level upon detection	
F47	168	Minimum value upon detection	
F48	168	Maximum value upon detection	



(1) Input NTSC signal that shows brightness gradation with 75% white into both the right and the left screen

- (2) Set "VIDEO STATUS" to STANDARD.
- (3) Set "ASPECT" to FULL.
- (4) Select "COLOR TEMPERATURE" to "LOW".
- (5) Set SPLIT screen mode.
- (6) Select "1.PICTURE/SOUND" from the SERVICE MODE for the right screen.
- (7) Set < F44 > (Picture control) to "001" and <F45 > (Picture control mode sw) to "000" to set Y ADJUST MAX mode.
- (8) Set < F46 > (Output level upon detection), < F47 > (Minimum value upon detection), and < F48 > (Maximum value upon detection) to values as shown in the left table.
- (9) Press the [MUTING] key to memoirze the set value.
- (10) Select "8.PP" from the SERVICE MODE.
- (11) Adjust < ADM010 > (G OFFSET) so that the 75% white part on the upper right part of the screen is white. (Fig.8)
- (12) Press the [MUTING] key to memoirze the set value.
- (13) Check the black level adjusted in "SPLIT screen BLACK LEVEL adjustment". Adjust the black level of SUB SCREEN again if it is not proper.
- (14) Select "1.PICTURE/SOUND" from the SERVICE MODE.
- (15) Set < F44 > (Picture control) to "000" to cancel Y ADJUST MAX MODE.
- (16) Press the [MUTING] key to memoirze the set value.

Item	Mesuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (HIGHLIGHT)	Remote control unit Signal generator		[1. PICTURE/SOUND] S13: RDRV (R DRIVE) S15: GDRV (G DRIVE) S17: BDRV (B DRIVE) S19: CUTR (R CUTOFF) S21: CUTG (G CUTOFF)	 (1) Input NTSC 75% all-white signal. (2) Set "VIDEO STATUS" to STANDARD. (3) Set "ASPECT" to FULL. (4) Select "COLOR TEMPERATURE" to "LOW". (5) Select "1.PICTURE/SOUND" from the SERVICE MODE. (6) Fix one of < S13 > (R DRIVE), < S15 > (G DRIVE), or < S17 > (B DRIVE). Lower the two that are not fixed so that the all-white screen is equally white throughout. Set one or more of < S13 >, < S15 >, and < S17 > to "255". (7) Check that white balance is properly tracked from lowlight to highlight. (8) Press the [MUTING] key to memoirze the set value. (9) Input 1125i 75% all-white signal. (10) Repeat steps (5) to (8) above. (11) Input 525i all-white signal. (12) Repeat steps (5) to (8) above.

4.7.3 MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part		Description	
MTS INPUT LEVEL	MPX Signal generator Remote control unit		[1.PICTURE/SOUND] A18: IN LEVEL		 (1) Input the color bar signal (400Hz). (2) Select 1.PICTURE/SOUND from the SERYMODE. (3) Verify that the < A18 > (IN LEVEL) is set at its is setting value. (4) Press the [MUTING] key to memorize the set value. 	
MTS SEPARATION	TV audio multiplex signal generator Oscilloscope Remote control unit	L OUT R OUT	[1.PICTURE/SOUND] A19: LOW SEP A20: HI SEP		 (1) Input the stereo L signal (300Hz) from the TV audi multiplex signal generator to the antenna terminal. (2) Connect an oscilloscope to L OUT pin of the MONITOR OUT, and display one cycle portion of the 300Hz signal. (3) Change the connection of the oscilloscope to R OU pin of the MONITOR OUT, and enlarge the voltag axis. (4) Select 1.PICTURE/SOUND from the SERVIC 	
	L-Channel signal waveform cycle	R-Change crosstall	-		 MODE. (5) Set the initial setting value of the < A19 > (LOW SEP). (6) Adjust the < A19 > so that the stroke element of the 300Hz signal will become minimum. (7) Change the signal to 3kHz, and similarly adjust the < A20 > (HI SEP). (8) Press the [MUTING] key to memorize the set value. 	

SECTION 5 TROUBLESHOOTING

5.1 SELF-DIAGNOSIS FEATURE

5.1.1 OUTLINE

This unit comes with the "Self-diagnosis" feature, which checks the operational state of the circuit and displays/saves it during failure. Diagnosis is performed when power is turned on, and information input to the main microcomputer is monitored at all time. Diagnosis is displayed in 2 ways via screen display and LED flashes. Failure detection is based on input state of I²C bus and the various control lines connected to the main microcomputer.

5.1.2 HOW TO ENTER THE SELF-DIAGNOSIS DISPLAY MODE

Before entering the Self-diagnosis Display mode, confirm that the setting of TV / CATV SW of the REMOTE CONTROL UNIT is at the "TV" side and the setting of VCR / DVD SW is at the "VCR" side. If the switches have not been properly set, you cannot enter the Self-diagnosis Display mode.

- (1) Press the [SLEEP TIMER] key and set it to 30 minutes.
- (2) Press the [VIDEO STATUS] key and [DISPLY] key simultaneously, then enter the TEST MODE.
- (3) Press the [4] key (Self-diagnosis Display mode) before the service mode screen disappears.
- (4) Press the [MTS] key to enter Page 2 of the Self-diagnosis Display mode.

*Use the [MTS] key to toggle between Page 1 and Page 2.

NOTE:

The remote control unit attached to this set does not contain the [MTS] key. To perform the procedure (4), use a remote control unit that contains the [MTS] key.

5.1.3 HOW TO EXIT THE SELF-DIAGNOSIS DISPLAY MODE To Save Failure History:

Turn off the power by unplugging the AC power cord plug when in the self-diagnosis display mode.

To Clear (Reset) Failure History:

Turn off the power by pressing the [POWER] key on the remote control unit when in the self-diagnosis display mode.

5.1.4 FAILURE HISTORY

Failure history can be counted up to 9 times for each item. When the number exceeds 9, display will remain as 9. Failure history will be stored in the memory unless it has been deleted.

NOTE:

Only SYNC (with/without sync signals) will be neither counted nor stored.

5.1.5 POINTS TO NOTE WHEN USING THE SELF-DIAGNOSIS FEATURE

In addition to circuit failures (abnormal operation), the following cases may also be iagnosed as "Abnormal" and displayed and counted as "NG".

- (1) Temporary defective transmissions across circuits due to pulse interruptions
- (2) Misalignment in the on/off timing of power for I²C bus (VCC) when turning on/off the main power.

Diagnosis may be impeded if a large number of items are displayed as "NG". As such, start self-diagnosis check only after 3 seconds in the case of receivers and 5 seconds in the case of panels upon turning on the power. If recurrences are expected, ensure to clear (reset) the failure history and record the new diagnosis reults.

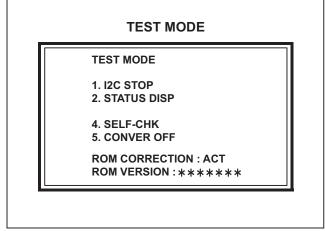


Fig.1

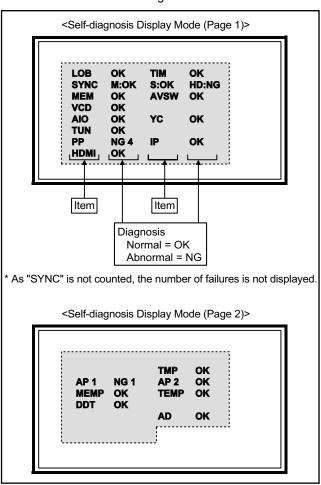


Fig.2

5.1.6 DETAILS

Self-diagnosis is performed for the following items:

• PAGE 1

Item	Display	Description of detection	Diagnosis signal (line)	Means of detection
LOW B LINE SHORT PROTECTION	LOB	Was Low B line short protector activated? No. of times short circuit protection is triggered [POWER PWB] (3.3V / LCD 5V / 9V / 13V / AVCC)	PROTECTOR	Detection starts 3 seconds upon power on Turns off power if NG is detected within 200ms
TIMER	TIM	Did power supply frequency fluctuated from: 50Hz → 60Hz 60Hz → 50Hz Number of counts [POWER PWB (PC9001)]	AC	Regularly detects power supply frequency by AC pulse counts and monitors frequency fluctuations other than instances immediately after reset
WITH / WITHOUT SYNC SIGNALS	SYNC	Are there synchronized signals? HD: Color difference synchronized signals M: Main Synchronized signals S: Sub-synchronized signals [IC1211]	SDA	Checks whether there are synchronized signal in video signal
MEMORY	MEM	Is ACK returned during I ² C transmission? [IC1703]	SDA	Monitors upon every I ² C transmission and counts if ACK is not returned
AV SWITCH	AVSW	Same as above [IC1301]	SDA	Same as above
VIDEO CHROMA	VCD	Same as above [IC7301]	SDA	Same as above
AUDIO PROCESSING	AIO	Same as above [IC6501]	SDA	Same as above
3D Y/C SEPARATION	YC	Same as above [IC3001]	SDA	Same as above
RF TUNER	TUN	Same as above [TU1101]	SDA	Same as above
MULTI-SCREEN PROCESSING	PP	Is ACK returned during I ² C transmission?	SDA	Monitors upon every I ² C transmission and counts if ACK is not returned
DIST PROCESSING	IP	Same as above [IC201]	SDA	Same as above
HDMI	HDMI	Not used (Only display)		

• PAGE 2

Item	Display	Description of detection	Diagnosis signal (line)	Means of detection
DEFECTIVE AUDIO OUTPUT PART	AP1	Detects short and abnormal temperature in audio circuit. [IC6641]	SDA	Detection starts 3 seconds upon power on. Performs detection every 16ms. If NG lasts for 300ms, audio output part is defec-
	AP2	Fault load of audio output part [IC6641]		tive. Controls [/AMP_RST] to [L] \rightarrow (0.5S) \rightarrow [H]. Monitors again, and turns off power if the defect is not corrected within 3 seconds.
DEVICE DRIVE COLOR MANAGEMENT	DDT	Is ACK returned during I ² C transmission? [IC401]	SDA	Monitors upon every I ² C transmission and counts if ACK is not returned.
A-D CONVERTER	AD	Is ACK returned during I ² C transmission? [IC001]	SDA	Monitors upon every I ² C transmission and counts if ACK is not returned.

5.1.7 DISPLAY METHOD WHEN RASTER IS NOT AVAILABLE

When raster is not displayed due to failure of the set, the POWER LED light will flash to indicate the ailure mode. Trigger for forced shutdown of power is stored and displayed.

Trigger of error	Display	LED flash cycle of display unit
LOW B LINE SHORT PROTECTION	LOB	Blue every 1.0 sec
DEFECTIVE AUDIO OUTPUT PART	AP1	Blue every 0.1 sec
	AP2	Blue every 0.5 sec

Details on Operation

Power of TV will be turned off when NG is detected for LOW B short Protection". "POWER LED" will start flashing immediately after power is turned off and power of tuner and panel cannot be turned on upon shutdown until the AC plugs are disconnected once and reconnected.





VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

PARTS LIST

CAUTION

- The parts identified by the △ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

	RESISTORS		CAPACITORS
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

	RESISTORS											
F	F G J K M N R H Z P											
±1%	±1% ±2% ±5% ±10% ±20% ±30% +30% +50% +80% +100% -0%											

CONTENTS

USING P.W. BOARD & REMOTE CONTROL UNIT	3-2
EXPLODED VIEW PARTS LIST	3-3
EXPLODED VIEW	3-4
PRINTED WIRING BOARD PARTS LIST	
VIDEO P.W. BOARD ASS'Y (LCA90152-03C)(SSB-1086A)	3-7
POWER P.W. BOARD ASS'Y (LCA90149-03F)(SSB-9086A)	3-9
REGULATOR P.W. BOARD ASS'Y (LCA90150-03D)(SSB-9186A)	3-10
RECEIVER P.W. BOARD ASS'Y (LCA90182-01B)(SSB-0J086A)	3-10
FRONT SENSOR SW P.W. BOARD ASS'Y (LCA90155-03B)(SSB-0L286A)	3-13
FRONT CONTROL P.W. BOARD ASS'Y (LCA90154-03D)(SSB-0L386A)	3-13
MI-COM & DIST MODULE P.W. BOARD ASS'Y (LCA10291-06A)(SSB-0D098A)	3-14
DIGITAL INPUT MODULE P.W. BOARD ASS'Y (26WX84KCP-S)	3-14
REMOTE CONTROL UNIT PARTS LIST (RM-C13G-1H)	
PACKING	3-15
PACKING PARTS LIST	3_15

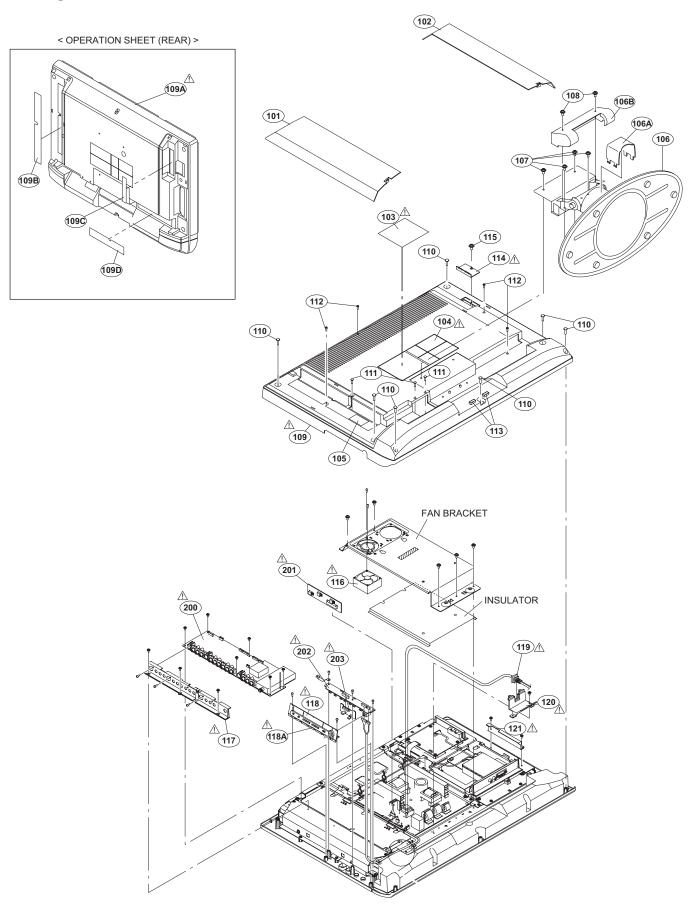
USING P.W. BOARD & REMOTE CONTROL UNIT

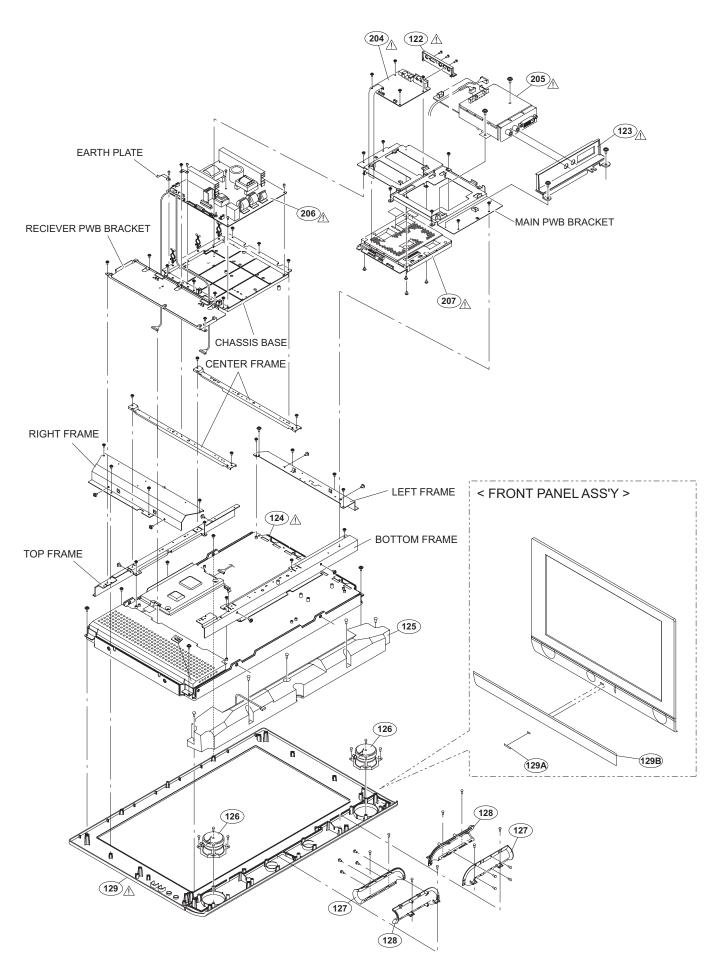
P.W.B ASS'Y Name	P.W.B ASS'Y No.
VIDEO P.W.B	LCA90152-03C(SSB-1086A)
POWER P.W.B	LCA90149-03F(SSB-9086A)
REGULATOR P.W.B	LCA90150-03D(SSB-9186A)
RECEIVER P.W.B	LCA90182-01B(SSB-0J086A)
FRONT SENSOR P.W.B	LCA90155-03B(SSB-0L286A)
FRONT CONTROL P.W.B	LCA90154-03D(SSB-0L386A)
MI-COM & DIST MODULE P.W.B	LCA10291-06A(SSB-0D098A)
DIGITAL INPUT MODULE P.W.B	26WX84KCP-S
REMOTE CONTROL UNIT	RM-C13G-1H

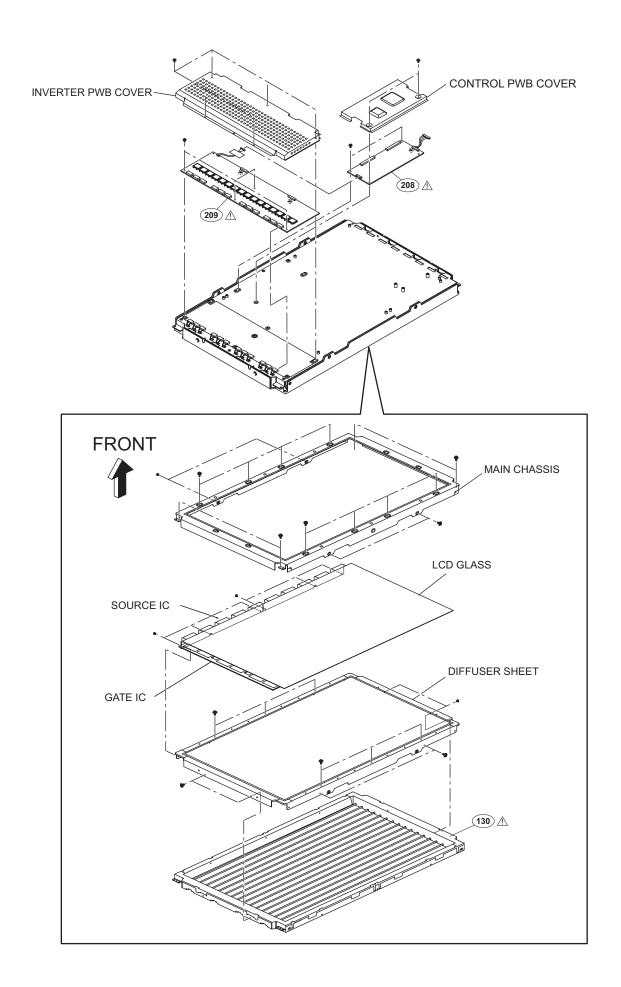
EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
<u>Λ</u>	101 102 103 104 105	LC11627-001B-HK LC11628-001B-HK LC21594-001A-0L LC41424-002A LC41749-001A	JACK COVER R JACK COVER L RATING LABEL HDCP WARNING CAUTION LABEL		
	106 106A 106B	LC41609-001C N0354 N0355	STAND ASSY STAND COVER CORD HOLDER	Inc.No.106A-106B	
	107 108	QYSPSPD5012M QYSPSPD3008N	SCREW SCREW	M5 x 12mm(x4) 3mm x 8mm(x2)	
<u>^</u>	109 109A 109B 109C 109D	LC11656-002E LC11626-002C LC32367-002A LC32368-002A LC32370-004A	REAR COVER ASSY REAR COVER OPERATION SHEET OPERATION SHEET OPERATION SHEET	Inc.No.109A-109D	
҈	110 111 112 113 114	QYSBSFG4016M QYSSSF3010M QYSPSPD3008M LC30599-054A LC32366-001A-HK	TAP SCREW TAP SCREW SCREW SCICK SHEET SERVICE COVER	4.0mm x 16mm(x7) M3 x 10mm(x3) 3mm x 8mm(x4) (x2)	
<u>^</u>	115 116 117	QYSBSF3012M QAR0295-001 LC21334-001D	TAP SCREW COOLING FAN TERMINAL BASE	3.0mm x 12mm	
<u>^</u>	118 118A	LC32351-002A LC21342-002A	CONT KNOB ASSY KNOB BASE	Inc.No.118A	
\(\Lambda \)	119 120 121 122 123 124 125 126	QMPR610-170-JC LC21348-001D-HK LC21349-002A-HK LC32346-002A LC32348-004A QLD0282-001 LC11633-001B QAS0142-001	POWER CORD POWER CORD HOLDER CARD BASE JACK BASE DIGITAL INPUT BASE LCD PANEL UNIT SPEAKER BOX SPEAKER	1.7m BLACK SP01/SP02(x2)	
	127 128	LC21339-001A-HK LC21340-001B-HK	DUCT BASE DUCT COVER	(x2) (x2)	
Δ	129 129A 129B	LC11623-002B CM48006-010-C LC21325-001D	F PANEL ASSY JVC MARK PUNCHING SHEET	Inc.No.129A-129B	
\triangle	130	LJ96-01100A	BACKLIGHT UNIT		
	200 201 202 203 204 205 206 207 208 209	LCA90182-01B LCA90150-03D LCA90154-03D LCA90155-03B LCA90152-03C LCA10352-25A LCA90149-03F LCA10291-06A CONTROL-26 INVERTER-26	RECEIVER PWB REGULATOR PWB FRONT CONTROL PWB FRONT SENSOR PWB VIDEO PWB DIGITAL INPUT MODULE PWB POWER PWB MI-COM & DIST MODULE PWB CONTROL PWB INVERTER PWB		

EXPLODED VIEW







PRINTED WIRING BOARD PARTS LIST

	P.W. BOARD A			Ref No.	Part No.	Part Name	Description Lo
Ref No.	152-03C)(SSB Part No.	Part Name	Description Local	C3006 C3007	NCF31CZ-104X NCB31AK-334X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 0.33uF 10V K
			·	C3008	NDC31HJ-151X	C CAPACITOR C CAPACITOR	150pF 50V J
IC1211	TA1318N	IC		C3009	NDC31HJ-121X	C CAPACITOR	120pF 50V J
IC1212	SN74AHC2G08T-X	IC		C3010 C3011	NDC31HJ-150X NCF11CZ-475X	C CAPACITOR C CAPACITOR	15pF 50V J 4.7uF 16V Z
IC1301	AN15852A	IC		C3011	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
IC3001 IC3002	MN82832 R1170H331B-X	IC IC		C3013	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
100002	KITTOTIOOTE X			C3014 C3015	QETN1CM-107Z NCF31CZ-104X	E CAPACITOR C CAPACITOR	100uF 16V M 0.1uF 16V Z
Q1232	2SA1530A/QR/-X	TRANSISTOR		C3016	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
Q1301 Q1302	2SC3837K/NP/-X 2SC3837K/NP/-X	TRANSISTOR TRANSISTOR		C3017	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
Q1303	2SC3837K/NP/-X	TRANSISTOR		C3018 C3019	NCF31CZ-104X NCB31HK-103X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 0.01uF 50V K
Q3001	2SC3928A/QR/-X	TRANSISTOR		C3019	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
Q3002 Q3003	2SC3928A/QR/-X 2SA1530A/QR/-X	TRANSISTOR TRANSISTOR		C3021	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
Q3003 Q3004	2SC3928A/QR/-X	TRANSISTOR		C3022 C3023	NCF31CZ-104X NCF31CZ-104X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 0.1uF 16V Z
Q3005	2SC3928A/QR/-X	TRANSISTOR		C3023	NCF31CZ-104X NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z 0.1uF 16V Z
Q3006 Q3007	2SA1530A/QR/-X 2SA1530A/QR/-X	TRANSISTOR TRANSISTOR		C3025	QETN1HM-106Z	E CAPACITOR	10uF 50V M
Q3501	2SA1530A/QR/-X	TRANSISTOR		C3026	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
Q3502	2SC3928A/QR/-X	TRANSISTOR		C3027 C3028	NDC31HJ-7R0X NDC31HJ-7R0X	C CAPACITOR C CAPACITOR	7pF 50V J 7pF 50V J
Q3505 Q3506	2SA1530A/QR/-X 2SC3928A/QR/-X	TRANSISTOR TRANSISTOR		C3029	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
Q3509	2SA1530A/QR/-X	TRANSISTOR		C3030	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
Q3510	2SC3928A/QR/-X	TRANSISTOR		C3031 C3032	NCF31CZ-104X NDC31HJ-560X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 56pF 50V J
D0400	MA0400/M/ V	7 DIODE		C3033	NDC31HJ-330X	C CAPACITOR	33pF 50V J
D2402 D2404	MA8100/M/-X MA8100/M/-X	Z DIODE Z DIODE		C3034	NDC31HJ-560X	C CAPACITOR	56pF 50V J
D2405	MA8100/M/-X	Z DIODE		C3035 C3036	NDC31HJ-330X NCF31CZ-104X	C CAPACITOR C CAPACITOR	33pF 50V J 0.1uF 16V Z
04040	OFTN/40M 4077	E CARACITOR	400	C3037	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1213 C1214	QETN1CM-107Z QETN1HM-225Z	E CAPACITOR E CAPACITOR	100uF 16V M 2.2uF 50V M	C3038	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1215	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	C3039 C3041	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1216	NCF11CZ-475X	C CAPACITOR	4.7uF 16V Z	C3041 C3042	QETN1HM-106Z NCB31HK-472X	E CAPACITOR C CAPACITOR	10uF 50V M 4700pF 50V K
C1218 C1219	NCB21CK-105X NCF11CZ-475X	C CAPACITOR C CAPACITOR	1uF 16V K 4.7uF 16V Z	C3044	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1219 C1233	NDC31HJ-180X	C CAPACITOR C CAPACITOR	18pF 50V J	C3045	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1301	QETN1CM-107Z	E CAPACITOR	100uF 16V M	C3046 C3047	NCB31HK-472X QETN1HM-106Z	C CAPACITOR E CAPACITOR	4700pF 50V K 10uF 50V M
C1302 C1303	QETN1CM-107Z NCB11CK-225X	E CAPACITOR	100uF 16V M	C3048	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1303	NCB11CK-225X NCB31CK-104X	C CAPACITOR C CAPACITOR	2.2uF 16V K 0.1uF 16V K	C3049	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1305	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C3050 C3051	NCB31HK-472X NCB31HK-472X	C CAPACITOR C CAPACITOR	4700pF 50V K 4700pF 50V K
C1306	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C3051	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1307 C1311	QETN1HM-106Z NCB21CK-105X	E CAPACITOR C CAPACITOR	10uF 50V M 1uF 16V K	C3053	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1312	NCB21CK-105X	C CAPACITOR	1uF 16V K	C3054	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C1313	NCB21CK-105X	C CAPACITOR	1uF 16V K	C3055 C3056	NCB31HK-472X NCB31HK-472X	C CAPACITOR C CAPACITOR	4700pF 50V K 4700pF 50V K
C1314 C1315	NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K	C3057	QETN1HM-106Z	E CAPACITOR	10uF 50V M
C1313	NCB31HK-103X NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3058	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1323	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3059 C3060	QETN1HM-105Z NCF31CZ-104X	E CAPACITOR C CAPACITOR	1uF 50V M 0.1uF 16V Z
C1324	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3061	QETN1HM-105Z	E CAPACITOR	1uF 50V M
C1325 C1326	NCB31HK-103X NDC31HJ-101X	C CAPACITOR C CAPACITOR	0.01uF 50V K 100pF 50V J	C3062	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1327	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C3063 C3064	QETN1HM-105Z NCF31CZ-104X	E CAPACITOR C CAPACITOR	1uF 50V M 0.1uF 16V Z
C1328	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C3065	QETN1HM-106Z	E CAPACITOR	10uF 50V M
C1332 C1333	NCB31HK-103X NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K	C3066	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1342	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3068 C3069	NCB31HK-103X QETN1CM-476Z	C CAPACITOR E CAPACITOR	0.01uF 50V K 47uF 16V M
C1343	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3070	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
C1354	NCB31HK-103X NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K	C3071	QETN1CM-476Z	E CAPACITOR	47uF 16V M
C1355 C1356	NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K	C3072	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1361	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3073 C3074	NCB10JK-106X NDC31HJ-680X	C CAPACITOR C CAPACITOR	10uF 6.3V K 68pF 50V J
C1362	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3077	NCB31AK-334X	C CAPACITOR	0.33uF 10V K
C1363 C1364	NCB31HK-103X NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K	C3078	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C1365	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C3080	QBTC1CK-106Z	TA E CAPACITOR	10uF 16V K
C1372	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C3082 C3086	NDC31HJ-151X NCB31HK-152X	C CAPACITOR C CAPACITOR	150pF 50V J 1500pF 50V K
C1382 C1392	NCB31CK-104X	C CAPACITOR C CAPACITOR	0.1uF 16V K	C3088	NDC31HJ-100X	C CAPACITOR	10pF 50V J
C1392 C2321	NCB31CK-104X NCB21CK-105X	C CAPACITOR C CAPACITOR	0.1uF 16V K 1uF 16V K	C3089	NDC31HJ-100X	C CAPACITOR	10pF 50V J
22322	NCB21CK-105X	C CAPACITOR	1uF 16V K	C3090	NDC31HJ-100X	C CAPACITOR	10pF 50V J
C2323	NCB21CK-105X	C CAPACITOR	1uF 16V K	C3099 C3100	NCB31HK-472X NCB31HK-472X	C CAPACITOR C CAPACITOR	4700pF 50V K 4700pF 50V K
C2341	NCB21CK-105X	C CAPACITOR	1uF 16V K	C3501	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C2342 C2343	NCB21CK-105X NCB21CK-105X	C CAPACITOR C CAPACITOR	1uF 16V K 1uF 16V K	C3502	NDC31HJ-101X	C CAPACITOR	100pF 50V J
C3001	QENC1AM-336Z	BP E CAPACITOR	33uF 10V M	C3503	NDC31HJ-121X	C CAPACITOR	120pF 50V J
C3002	NDC31HJ-151X	C CAPACITOR	150pF 50V J	C3504 C3506	NDC31HJ-150X NCF11CZ-475X	C CAPACITOR C CAPACITOR	15pF 50V J 4.7uF 16V Z
C3003	NDC31HJ-121X	C CAPACITOR	120pF 50V J	C3507	NCF31CZ-475X	C CAPACITOR	0.1uF 16V Z
C3004 C3005	NDC31HJ-150X NCF11CZ-475X	C CAPACITOR C CAPACITOR	15pF 50V J 4.7uF 16V Z	C3508	NDC31HJ-101X	C CAPACITOR	100pF 50V J
	NOI 1104-4/3A	OUNTAUTION	4.7 UF 10 V ∠	C3509	NDC31HJ-121X	C CAPACITOR	120pF 50V J

⚠Ref No.	Part No.	Part Name	Description Local	⚠Ref No.	Part No.	Part Name	Description Local
C3510	NDC31HJ-150X	C CAPACITOR	15pF 50V J	R3039	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C3512 C3513	NCF11CZ-475X NCF31CZ-104X	C CAPACITOR C CAPACITOR	4.7uF 16V Z 0.1uF 16V Z	R3040 R3042	NRSA63J-101X NRSA63J-103X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 10kΩ 1/16W J
C3514	NDC31HJ-101X	C CAPACITOR C CAPACITOR	100pF 50V J 120pF 50V J	R3043 R3044	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
C3515 C3516	NDC31HJ-121X NDC31HJ-150X	C CAPACITOR C CAPACITOR	15pF 50V J	R3045	NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J
C3518	NCF11CZ-475X	C CAPACITOR	4.7uF 16V Z	R3047 R3048	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C3519 C3520	QENC1CM-336Z QENC1CM-336Z	BP E CAPACITOR BP E CAPACITOR	33uF 16V M 33uF 16V M	R3048 R3049	NRSA63J-331X NRSA63J-104X	MG RESISTOR MG RESISTOR	330Ω 1/16W J 100kΩ 1/16W J
C3521	QENC1CM-336Z	BP E CAPACITOR	33uF 16V M	R3050	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R1202	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R3051 R3052	NRSA63J-123X NRSA63J-331X	MG RESISTOR MG RESISTOR	12kΩ 1/16W J 330Ω 1/16W J
R1203	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J 8.2kΩ 1/16W J	R3053	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J 10kΩ 1/16W J
R1218 R1219	NRSA63J-822X NRSA63J-331X	MG RESISTOR MG RESISTOR	8.2kΩ 1/16W J 330Ω 1/16W J	R3054 R3055	NRSA63J-103X NRSA63J-682X	MG RESISTOR MG RESISTOR	6.8kΩ 1/16W J
R1220	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R3056	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R1221 R1226	NRSA63J-101X NRSA63J-103X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 10kΩ 1/16W J	R3057 R3058	NRSA02J-0R0X NRSA63J-102X	MG RESISTOR MG RESISTOR	0Ω 1/10W J 1kΩ 1/16W J
R1228 R1229	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R3059 R3060	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R1230	NRSA63J-332X NRSA63J-101X	MG RESISTOR MG RESISTOR	3.3kΩ 1/16W J 100Ω 1/16W J	R3061	NRSA63J-182X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	1.8kΩ 1/16W J 0Ω 1/16W J
R1231 R1232	NRSA63J-221X NRSA63J-562X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 5.6kΩ 1/16W J	R3062 R3063	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1234 R1236	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R3064	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1236 R1301	NRSA63J-562X NRSA63J-101X	MG RESISTOR MG RESISTOR	5.6kΩ 1/16W J 100Ω 1/16W J	R3065 R3066	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
R1302	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R3071	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1321 R1322	NRSA63J-151X NRSA63J-151X	MG RESISTOR MG RESISTOR	150Ω 1/16W J 150Ω 1/16W J	R3072 R3073	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1323	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	R3074	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1351 R1352	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J	R3075 R3076	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1353	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R3077	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1372 R1374	NRSA63J-101X NRSA63J-471X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 470Ω 1/16W J	R3078 R3079	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1375	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R3080	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1376 R1377	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J	R3081 R3082	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1382 R1384	NRSA63J-101X NRSA63J-471X	MG RESISTOR	100Ω 1/16W J	R3501 R3502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1385	NRSA63J-0R0X	MG RESISTOR MG RESISTOR	470Ω 1/16W J 0Ω 1/16W J	R3503	NRSA63J-101X NRSA63J-182X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 1.8kΩ 1/16W J
R1386 R1387	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J	R3504 R3505	NRSA63J-181X NRSA63J-103X	MG RESISTOR MG RESISTOR	180Ω 1/16W J 10kΩ 1/16W J
R1392	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R3507	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R1394 R1395	NRSA63J-471X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	470Ω 1/16W J 0Ω 1/16W J	R3508 R3509	NRSA63J-0R0X NRSA63J-222X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 2.2kΩ 1/16W J
R1396	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R3511	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1397 R2322	NRSA63J-0R0X NRSA63J-750X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 75Ω 1/16W J	R3516 R3517	NRSA63J-680X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	68Ω 1/16W J 0Ω 1/16W J
R2325 R2328	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J 75Ω 1/16W J	R3518	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J 1.8kΩ 1/16W J
R3001	NRSA63J-750X NRSA63J-123X	MG RESISTOR MG RESISTOR	75Ω 1/16W J 12kΩ 1/16W J	R3519 R3520	NRSA63J-182X NRSA63J-181X	MG RESISTOR MG RESISTOR	1.0KΩ 1/16W J 180Ω 1/16W J
R3002	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R3521	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J 100Ω 1/16W J
R3003 R3004	NRSA63J-101X NRSA63J-332X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 3.3kΩ 1/16W J	R3523 R3525	NRSA63J-101X NRSA63J-222X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J
R3005 R3006	NRSA63J-181X NRSA63J-152X	MG RESISTOR MG RESISTOR	180Ω 1/16W J 1.5kΩ 1/16W J	R3532 R3533	NRSA63J-680X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	68Ω 1/16W J 0Ω 1/16W J
R3007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R3534	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R3008 R3009	NRSA63J-0R0X NRSA63D-102X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 1kΩ 1/16W D	R3535 R3536	NRSA63J-182X NRSA63J-181X	MG RESISTOR MG RESISTOR	1.8kΩ 1/16W J 180Ω 1/16W J
R3010	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	R3537	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R3011 R3012	NRSA63J-0R0X NRSA63J-123X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 12kΩ 1/16W J	R3539 R3541	NRSA63J-101X NRSA63J-222X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 2.2kΩ 1/16W J
R3013 R3014	NRSA63J-333X NRSA63J-101X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 100Ω 1/16W J	R3548 R3549	NRSA63J-680X NRSA63J-223X	MG RESISTOR MG RESISTOR	68Ω 1/16W J 22kΩ 1/16W J
R3015	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R3550	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R3016 R3017	NRSA63J-181X NRSA63J-152X	MG RESISTOR MG RESISTOR	180Ω 1/16W J 1.5kΩ 1/16W J	R3551 R3552	NRSA63J-0R0X NRSA63J-223X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 22kΩ 1/16W J
R3018	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R3553	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R3019 R3020	NRSA63J-0R0X NRSA63D-102X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 1kΩ 1/16W D	R3554 R3555	NRSA63J-223X NRSA63J-223X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 22kΩ 1/16W J
R3021	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	RA3001	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4
R3022 R3023	NRSA63J-0R0X NRSA63J-473X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 47kΩ 1/16W J	RA3002 RA3003	NRZ0040-103X NRZ0040-103X	NET RESISTOR NET RESISTOR	10kΩ 1/16W J x4 10kΩ 1/16W J x4
R3024	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	RA3004	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4
R3025 R3026	NRSA63J-223X NRSA63J-223X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 22kΩ 1/16W J	L1211	QQL25CK-100Z	COIL	10uH K
R3027	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	L1301	QRN143J-0R0X	C RESISTOR	0Ω 1/4W J
R3028 R3029	NRSA63J-471X NRSA63J-471X	MG RESISTOR MG RESISTOR	470Ω 1/16W J 470Ω 1/16W J	L1302 L3001	QRN143J-0R0X NQL092K-6R8X	C RESISTOR P COIL	0Ω 1/4W J 6.8uH K
R3030 R3031	NRSA63J-471X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	470Ω 1/16W J 0Ω 1/16W J	L3002 L3003	NQL092K-6R8X NQR0413-003X	P COIL FERRITE BEADS	6.8uH K
R3032	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	L3004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R3033 R3035	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J	L3005 L3006	NRSA02J-0R0X NRSA02J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/10W J 0Ω 1/10W J
R3036	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	L3007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R3037	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	L3501	NQL092K-6R8X	P COIL	6.8uH K

ÆRef No.	Part No.	Part Name	Description Local	Ref No.	Part No.	Part Name	Description Local
L3502 L3503	NQL092K-6R8X NQL092K-6R8X	P COIL P COIL	6.8uH K 6.8uH K		QCZ9082-472Z QCZ9082-472Z	C CAPACITOR C CAPACITOR	4700pF AC250V M 4700pF AC250V M
CN100H CN100N CN10AQ J2121 K3001 LC3002 LC3003 LC3005 LC3006 LC3007 LC3008 LC3501 LC3502 LC3503 SL1211	QGF0508C1-30W QGA1501C2-04V QGA2001C2-09V QNN0584-001 NRSA02J-0R0X NQR0450-002X NQR0450-002X NQR0450-004X NQR0450-004X NQR0450-002X NQR0450-002X NQR0450-002X NQR0450-002X NQR0450-002X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X NQR0450-004X CSB503F30 NAX0570-001X	CONNECTOR CONNECTOR CONNECTOR PIN JACK MG RESISTOR EMI FILTER C RESONATOR CRYSTAL	FFC/FPC (1-30) W-B (1-4) W-B (1-9) COMPONENT IN 0Ω 1/10W J 22pF 50V M 22pF 50V M 0.1uF 25V M 100pF 50V M 22pF 50V M 100pF 50V M 100pF 50V M 100pF 50V M 100pF 50V M	C9111 C9141 C9141 C9142 C9143 AC9197 AC9198 AC9201 AC9203 AC9204 AC9205 C9211 C9212 C9213 C9214 C9215 C9216 C9218 C9501 C9503 C9504	QEHQ2GM-226 QTMN1CM-477Z QEHR1AM-337Z QEHR1CM-107Z QCZ9079-102 QCZ9079-222 QCZ9082-222Z QCZ9082-222Z QCZ9082-222Z QCZ9082-222Z QFZ0128-474 NCB31HK-103X NCB21CK-684X NDC31HJ-102X QEZ0650-227 NCB31HK-103X NCB31EK-104X NDC31HJ-221X QFZ92JK-332 QFP32JK-332	E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR P CAPACITOR P CAPACITOR P CAPACITOR P CAPACITOR	22uF 400V M 470uF 16V M 330uF 10V M 100uF 16V M 100uF 16V M 1000pF AC250V M 2200pF AC250V M 0.47uF DC400V H 0.01uF 50V K 0.68uF 16V K 1000pF 50V J 47uF 35V M 220uF 450V M 0.01uF 25V K 220pF 50V J 3300pF 630V K 3300pF 630V K
	R P.W. BOARD 149-03F)(SSB			C9505 C9506 C9508 C9509	QCZ0354-331Z QCZ0354-331Z NDC31HJ-471X QEHR1HM-476Z	C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR	330pF 2kV K 330pF 2kV K 470pF 50V J 47uF 50V M
⚠Ref No.	Part No.	Part Name	Description Local	C9510 C9511 C9512	QEHR1HM-107Z QEHR1HM-475Z NCB31HK-472X	E CAPACITOR E CAPACITOR C CAPACITOR	100uF 50V M 4.7uF 50V M 4700pF 50V K
⚠IC9211 ⚠IC9501 ⚠IC9541 IC9901 IC9902	MC33262D-X STR-F6268S-F3 SE015N-LF12 SI-8033S/F1 PQ1CG2032FZ	IC IC IC IC		C9541 C9543 C9544 C9545 C9546 C9547	QCZ0354-681Z QECR1EM-687Z QECR1EM-687Z QEHR2AM-106Z QCZ0354-681Z QCZ0354-681Z	C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR	680pF 2kV K 680uF 25V M 680uF 25V M 10uF 100V M 680pF 2kV K
Q9021 Q9211 Q9212 Q9213 Q9215 Q9502 Q9541 Q9901 Q9902 Q9903 Q9904 Q9905 Q9906	UN2211-X 2SK2196 2SC3928A/QR/-X IMD3A-W 2SC3928A/QR/-X 2SC3928A/QR/-X UN2213-X 2SC3928A/QR/-X UN2213-X 2SC3928A/QR/-X 2SC3928A/QR/-X 2SC3928A/QR/-X 2SC3928A/QR/-X UN2213-X	TRANSISTOR POWER MOS FET TRANSISTOR DIGI TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR		C9548 C9549 C9550 C9551 C9552 C9553 C9554 C9901 C9903 C9905 C9906 C9908 C9910	QECQ1EM-188 QECQ1EM-188 QECQ1EM-188 QECQ1EM-188 QEHR1HM-106Z QEHR1HM-107Z NCB31HK-104X NBZ0017-106X QECR1AM-128Z NBZ0017-106X QEZ0255-128 NCB31EK-104X QEHR1HM-476Z QEZ0256-128	E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR SP E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR	1800uF 25V M 1800uF 25V M 1800uF 25V M 1800uF 25V M 100uF 50V M 10uF 50V M 0.1uF 50V K 10uF 25V M 1200uF 10V M 1200uF 16V M 0.1uF 25V K 47uF 50V M 1200uF 10V M
D9001 D9021 D9111 ♣D9201 D9202 D9211 D9213 D9214 D9501 D9502 D9503 D9504 D9505 D9506 D9507 D9509 D9510 D9511 D9513 D9541 D9542 D9543 D9544 D9545 D9546 D9901 D9902 D9903 D9904 D9905	MA3047/H/-X MA111-X S1WB/A/60-4101 D25XB60 MA111-X D5L60 MA111-X MA111-X RD12E/B2/-T5 RD33E/B/-T5 RD5.1E/B2/-T5 SARS01-T2 SARS01-T2 D1FL20U-X PG104RS-T2 D1FS4-X D1FS4-X MA111-X MA111-X FME-220A EU2-T3 FME-220A FME-220A RD16E/B/-T5 RD16E/B/-T5 RC44-LFT4 MA111-X EC30HA03L-X MA111-X PTZ16B-X	Z DIODE SI DIODE BRIDGE DIODE BRIDGE DIODE BRIDGE DIODE SI DIODE SI DIODE SI DIODE SI DIODE Z DIODE Z DIODE Z DIODE SI DIODE SB DIODE SI DIODE SB DIODE SI DIODE SD DIODE	2 21/E AC250V M	C9912 ⚠R9001 R9003 R9004 R9101 R9148 ⚠R9199 R9201 R9203 R9211 R9212 R9213 R9214 R9215 R9216 R9217 R9218 R9220 R9221 R9222 R9223 R9224 R9225 R9226 R9227 R9228 R9227 R9228 R9233 R9236 R9237 R9501	QEHR1CM-477Z QRZ9046-105Z QRE121J-473Y QRE121J-473Y QRE121J-473Y QRZ0216-4R7 NRSA63J-103X QRZ9046-685Z QRZ0121-200 QRL01EJ-561X NRS12BJ-474W NRS12BJ-474W NRS12BJ-334W NRSA63J-224X NRSA63J-224X NRSA63J-224X NRSA63J-103X NRS12BJ-334W NRS12BJ-3474W NRS12BJ-474W NRS12BJ-474W NRSA63J-103X QRL03EJ-333X	C RESISTOR C RESISTOR C RESISTOR C RESISTOR UNF WW RESISTOR G RESISTOR C RESISTOR UNF WW RESISTOR C RESISTOR MG RESISTOR	470uF 16V M 1MΩ 1/2W K 47kΩ 1/2W J 47kΩ 1/2W J 4.7Ω 7W K 10kΩ 1/16W J 6.8MΩ 1/2W K 20Ω 5W J 560Ω 1W J 470kΩ 1/2W J 470kΩ 1/2W J 330kΩ 1/2W J 330kΩ 1/16W J 220kΩ 1/16W J 330Ω 1/2W J 330kΩ 1/2W J 3470kΩ 1/2W J 470kΩ 1/16W J 470kΩ 1/16W J 470kΩ 1/16W J 470kΩ 1/2W J
⚠C9001 ⚠C9002 ⚠C9011 ⚠C9013 ⚠C9101	QFZ9073-225 QFZ9075-105 QCZ9079-102 QCZ9079-102 QCZ9082-472Z	MM CAPACITOR MPP CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR	2.2uF AC250V M 1uF AC275V M 1000pF AC250V M 1000pF AC250V M 4700pF AC250V M	R9501 R9502 R9503 R9504 R9505 R9506	QRL03EJ-333X NRS12BJ-224W NRS12BJ-224W QRL03EJ-220X QRL03EJ-220X	OMF RESISTOR OMF RESISTOR MG RESISTOR MG RESISTOR OMF RESISTOR OMF RESISTOR	33kΩ 3W J 33kΩ 3W J 220kΩ 1/2W J 220kΩ 1/2W J 22Ω 3W J 22Ω 3W J

Ref No.	Part No.	Part Name	Description Local		.ATOR P.W. B(150-03D)(SSE		
R9507 R9508	QRM059J-R15 QRT02EJ-1R5X	MP RESISTOR MF RESISTOR	0.15Ω 5W J 1.5Ω 2W J	ÆRef No.	Part No.	Part Name	Description Local
↑R9509 R9512 R9513 R9514 R9515	QRZ9009-1R5 QRK126J-152X NRSA63J-332X NRSA63J-154X QRK126J-221X	FUSI RESISTOR UNF C RESISTOR MG RESISTOR MG RESISTOR UNF C RESISTOR	1.5Ω 1/2W J 1.5kΩ 1/2W J 3.3kΩ 1/16W J 150kΩ 1/16W J 220Ω 1/2W J	IC9801 IC9802 IC9803	SI-8090JD-W SI-8050JD-W SI-8050JD-W	IC IC IC	
R9516 R9517 R9518 R9519 R9541	NRS12BJ-332W NRS12BJ-332W NRSA63J-224X NRS12BJ-100W NRSA63J-0R0X QRL02EJ-152X NRSA63J-152X	MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR OMF RESISTOR	3.3kΩ 1/2W J 220kΩ 1/16W J 10Ω 1/2W J 0Ω 1/16W J 1.5kΩ 2W J	Q9801 Q9802 Q9803 Q9804 Q9805	2SC3928A/QR/-X 2SC3928A/QR/-X 2SC3928A/QR/-X 2SC3928A/QR/-X UN2213-X	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGI TRANSISTOR	
R9542 R9544 R9545 R9546 R9626 R9902 R9903 R9905 R9906 R9907 R9908 R9909	NRSA63J-181X QRL02EJ-331X NRSA63J-472X NRSA63J-682X NRS12BJ-220W NRSA63J-102X NRSA63J-102X NRSA63J-682X NRSA63J-332X NRSA63J-472X NRSA63J-102X	MG RESISTOR MG RESISTOR OMF RESISTOR MG RESISTOR	1.5kΩ 1/16W J 180Ω 1/16W J 330Ω 2W J 4.7kΩ 1/16W J 6.8kΩ 1/16W J 22Ω 1/2W J 1kΩ 1/16W J 1kΩ 1/16W J 6.8kΩ 1/16W J 3.3kΩ 1/16W J 4.7kΩ 1/16W J	D9801 D9802 D9803 D9804 D9805 D9806 D9807 D9808 D9809 D9810	EC30HA03L-X MA111-X EC30HA03L-X MA111-X MA3030/H/-X EC30HA03L-X PTZ6.8B-X MA111-X PTZ11B-X PTZ6.8B-X	SB DIODE SI DIODE SB DIODE SI DIODE Z DIODE SB DIODE Z DIODE	
R9911 R9912 R9915 R9916 R9918 R9919 R9920 R9921 R9922 R9923	NRSA63J-224X NRSA63J-0R0X NRSA63D-102X NRSA63D-103X NRSA63J-472X NRSA63J-102X NRSA63J-102X NRSA63J-122X NRSA63J-123X NRSA63J-123X NRSA63J-182X	MG RESISTOR	$\begin{array}{c} 220 k\Omega \ 1/16 W \ J \\ 0\Omega \ 1/16 W \ J \\ 1 k\Omega \ 1/16 W \ D \\ 10 k\Omega \ 1/16 W \ D \\ 4.7 k\Omega \ 1/16 W \ J \\ 1 k\Omega \ 1/16 W \ J \\ 220 k\Omega \ 1/16 W \ J \\ 1.2 k\Omega \ 1/16 W \ J \\ 12 k\Omega \ 1/16 W \ J \\ 12 k\Omega \ 1/16 W \ J \\ 1.8 k\Omega \ 1/16 W \ J \\ \end{array}$	C9801 C9803 C9805 C9807 C9809 C9810 C9811 C9813 C9814	NBZ0017-106X NBZ0010-396X NBZ0017-106X NBZ0010-396X NEH91HM-105X NBZ0010-396X NBZ0010-396X NCB31HK-473X NEH90JM-107X NEH91CM-476X	SP E CAPACITOR SP E CAPACITOR SP E CAPACITOR SP E CAPACITOR E CAPACITOR SP E CAPACITOR SP E CAPACITOR SP E CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR	10uF 25V M 39uF 16V M 10uF 25V M 39uF 16V M 1uF 50V M 10uF 25V M 39uF 16V M 0.047uF 50V K 100uF 6.3V M
L9141 L9201 L9541 L9902 L9904 L9905 AT9121	NQL52EN-4R7X QQR1399-001 NQL52EM-220X QQR1401-001 NQL63EM-470X NQL80CL-100X QAL0515-001 QQS0222-001	COIL CHOKE COIL COIL CHOKE COIL COIL COIL POWER TRANSF SW TRANSF	4.7uH N 22uH M 47uH M 10uH L	C9816 C9817 R9801 R9802 R9803 R9804 R9807 R9808	NEH90JM-107X NEH90JM-107X NRSA63J-0R0X NRS12BJ-6R8W NRSA63D-152X NRSA63D-152X NRSA63J-472X NRSA63J-102X	E CAPACITOR E CAPACITOR MG RESISTOR	100uF 6.3V M 100uF 6.3V M 0Ω 1/16W J 6.8Ω 1/2W J 1.5kΩ 1/16W D 1.5kΩ 1/16W D 4.7kΩ 1/16W J 1kΩ 1/16W J
CN0001 CN000A CN000B CN000F CN000G CN000P CN000Q CN000Y CN00E1 CN00PW &CP9121 &CP9211 &F9001 &H9211 H9541 H9901 H9902 K9001 K9501 K9502 K9503	QGB2501J1-13 QGA2001C2-13V QGA1501C2-13V QGA2001C2-04V QGA1501C2-10V QGA1201C2-15X QGA1201C2-15X QGA2001C2-02V CE41507-001P	CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR LV CONNECTOR LV CONNECTOR FUSE FUSE FUSE HEAT SINK/AL-F/ HEAT SINK ASSY HEAT SINK/AL-F/ C RESISTOR C RESISTOR C RESISTOR C RESISTOR	B-B (1-13) W-B (1-13) W-B (1-13) W-B (1-13) W-B (1-4) W-B (1-10) W-B (1-15) W-B (1-15) W-B (1-15) W-B (1-2) 2A AC250V 5A AC250V 6.3A AC250V 0Ω 1/4W J 0Ω 1/4W J 0Ω 1/4W J	R9809 R9809 R9810 R9811 R9812 R9813 R9815 R9816 R9817 R9819 R9820 R9821 R9822 R9823 R9825 R9825 R9826 R9827 R9828 R9829 R9831	NRSA63J-102X NRSA63J-102X NRSA63J-122X NRSA63J-122W NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-182X NRSA63J-472X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-182X NRSA63J-182X NRSA63J-182X NRSA63J-182X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-102X	MG RESISTOR	1 KΩ 1/16W J 10 kΩ 1/16W J 1.2kΩ 1/16W J 2Ω 1/16W J 22Ω 1/2W J 1kΩ 1/16W J 1kΩ 1/16W J 6.8kΩ 1/16W J 1.8kΩ 1/16W J 4.7kΩ 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 1kΩ 1/16W J 1.8kΩ 1/16W J
K9503 K9504 K9505 K9541 K9542	QRN143J-0R0X QQR0621-002Z QQR0621-002Z QRN143J-0R0X QRN143J-0R0X	C RESISTOR FERRITE BEADS FERRITE BEADS C RESISTOR C RESISTOR	0Ω 1/4W J 0Ω 1/4W J 0Ω 1/4W J	L9802 L9804 L9806 L9807	NQL63EM-101X NQL63EM-101X NQL63EM-101X NQL80CL-100X	COIL COIL COIL	100uH M 100uH M 100uH M 10uH L
K9543 K9544 K9545 K9901 △LF9001 △LF9002	QRN143J-0R0X QRN143J-0R0X QRN143J-0R0X NQR0413-003X QQR1281-004 QQR1281-004	C RESISTOR C RESISTOR C RESISTOR FERRITE BEADS LINE FILTER LINE FILTER	0Ω 1/4W J 0Ω 1/4W J 0Ω 1/4W J 0Ω 1/4W J	CN1001 K9801 K9802 K9803	QGB2501K2-13 NRSA02J-0R0X NRSA02J-0R0X NRSA02J-0R0X	CONNECTOR MG RESISTOR MG RESISTOR MG RESISTOR	B-B (1-13) 0Ω 1/10W J 0Ω 1/10W J 0Ω 1/10W J
⚠LF9003 ⚠PC9001 ⚠PC9541 ⚠PC9542 ⚠RY9021	QQR1376-001 PC123Y22 PC123Y22 PC123Y22 QSK0119-001	LINE FILTER PHOTO COUPLER PHOTO COUPLER PHOTO COUPLER RELAY			/ER P.W. BOAF 182-01B)(SSB-		
⚠RY9201 ⚠VA9001	QSK0117-001 ERZV10V621CS	RELAY ZNR		Ref No.	Part No.	Part Name	Description Local
				IC1101 IC1102 IC1501	M62320FP-X CXA2134Q-X CXA2069Q	IC IC IC	

Ref No.	Part No.	Part Name	Description Local	ÆRef No.	Part No.	Part Name	Description Local
IC6101 IC6401 IC6501 IC6531 IC6551 IC6641 IC6701	AN77L12-T TA8119P NJW1137M-W RC4558D-X RC4558D-X TA2024ASE-X M62320FP-X	IC IC IC IC IC IC		C1146 C1147 C1148 C1149 C1150 C1151 C1152	QETN1HM-105Z QETN1HM-475Z QETN1HM-106Z QETN1HM-475Z QETN1CM-107Z QENC1HM-475Z QETN1HM-475Z	E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR BP E CAPACITOR E CAPACITOR	1uF 50V M 4.7uF 50V M 10uF 50V M 4.7uF 50V M 100uF 16V M 4.7uF 50V M 4.7uF 50V M
Q1101 Q1102 Q1103 Q2251 Q2252 Q2253 Q2254 Q2255 Q2260 Q6401 Q6402 Q6505 Q6506 Q6551 Q6581 Q6582 Q6591 Q6592 Q6593 Q6601 Q6702 Q6703	2SC3928A/QR/-X 2SA1530A/QR/-X 2SC3928A/QR/-X KTA1267/YG/-T KTA1267/YG/-T UN2226-X UN2226-X UN2110-X 2SA1530A/QR/-X UN2226-X UN2210-X 2SC3928A/QR/-X	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR		C1153 C1154 C1155 C1156 C1157 C1158 C1159 C1160 C1161 C1162 C1163 C1164 C1165 C1166 C1167 C1168 C1170 C1171 C1505 C1506 C1507 C1508	QENC1HM-475Z NCB31HK-4773X QETN1HM-335Z QENC1HM-475Z QETN1HM-106Z QETN1HM-105Z NCF31CZ-104X NCF31CZ-104X NCF31CZ-104X NCF31CZ-104X NCF31CZ-104X NCB31HK-223X NCB31HK-472X QENC1HM-475Z NCB31HK-472X NCB31HK-472X NCB31HK-103X	BP E CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR BP E CAPACITOR E CAPACITOR C CAPACITOR BP E CAPACITOR BP E CAPACITOR C CAPACITOR	4.7uF 50V M 2700pF 50V K 0.047uF 50V K 3.3uF 50V M 4.7uF 50V M 10uF 50V M 11uF 50V M 0.1uF 16V Z 0.022uF 50V K 4700pF 50V K 4700pF 50V K 2.2uF 16V K 2.2uF 16V K 2.2uF 16V K 0.01uF 50V M 4.7uF 50V M 22uF 50V M 0.01uF 50V K 0.01uF 50V K
Q6705 D2101 D2101 D2101 D2204 D2205 D2206 D2209 D2210 D2212 D2213 D2215 D2216 D2217 D2218 D2251 D2252 D2253 D2258 D2259 D6401 D6561 D6562 D6571 D6572 D6573 D6574 D6584	2SA1530A/QR/-X MA8100/M/-X MA8111-X MA111-X	TRANSISTOR Z DIODE SI DIODE		C1537 C1538 C1539 C1540 C1541 C1591 C1593 C2102 C2103 C2104 C2105 C2106 C2123 C2124 C2125 C2127 C2128 C2144 C2145 C2145 C2251 C2252 C2253 C2254 C2255 C2256 C2257 C2261 C2262 C2263 C6101 C6102 C6103 C6104 C6401 C6402 C6403 C6404 C6405 C6406 C6407	NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X QETN1CM-477Z QETN0JM-108Z NCB31HK-103X QETN1HM-106Z QETN1HM-106Z NCB31HK-103X QETN1HM-106Z QETN1HM-106Z NCB11CK-225X NCB31HK-103X QETN1HM-106Z NCB11CK-225X NCB11CK-105X NCB11CK-225X NCB11CK-105X NCB1C	C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR C C C C C C C C C C C C C C C C C	0.01uF 50V K 470uF 16V M 1000uF 6.3V M 0.01uF 50V M 10uF 50V M 10uF 50V M 2.2uF 16V K 2.2uF 16V K 2.2uF 16V K 0.01uF 50V M 10uF 50V M 10uF 50V M 2.2uF 16V K 100F 50V M 2.2uF 16V K 1000uF 10V M 2.2uF 16V K 1000uF 10V M 2.2uF 16V K 10F 10V M 4.7uF 50V M 4.7uF 25V M 1000pF 50V K 10uF 50V M 4.7uF 50V M
C1102 C1103 C1109 C1110 C1118 C1119 C1141 C1142 C1143 C1144 C1145	QETN1CM-477Z QETN1HM-106Z NCB11CK-225X NCF31CZ-104X NDC31HJ-221X NDC31HJ-221X QENC1HM-475Z NCB31EK-104X QENC1HM-475Z NCB31HK-562X NCB31HK-123X	E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR BP E CAPACITOR C CAPACITOR	470uF 16V M 10uF 50V M 2.2uF 16V K 0.1uF 16V Z 220pF 50V J 220pF 50V J 4.7uF 50V M 0.1uF 25V K 4.7uF 50V M 5600pF 50V K 0.012uF 50V K	C6408 C6409 C6410 C6503 C6504 C6505 C6506 C6507 C6508 C6509 C6511	QETN1AM-227Z QETN1HM-105Z QETN1HM-475Z QETN1HM-475Z NCB31HK-332X NCB31HK-332X NCB31HK-333X NCB31HK-373X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X	E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR	220uF 10V M 1uF 50V M 1uF 50V M 4.7uF 50V M 4.7uF 50V M 3300pF 50V K 3300pF 50V K 0.033uF 50V K 0.033uF 50V K 4700pF 50V K 4700pF 50V K 0.1uF 16V Z

⚠Ref No.	Part No.	Part Name	Description Local	ÆRef No.	Part No.	Part Name	Description Local
C6512 C6513	NCF31CZ-104X QETN1HM-225Z	C CAPACITOR E CAPACITOR	0.1uF 16V Z 2.2uF 50V M	R1150 R1152	NRSA63F-623X	MG RESISTOR MG RESISTOR	62kΩ 1/16W F 3.3kΩ 1/16W J
C6513	QETN1HM-225Z QETN1HM-225Z	E CAPACITOR E CAPACITOR	2.2uF 50V M 2.2uF 50V M	R1154	NRSA63J-332X NRSA63J-302X	MG RESISTOR	3.3kΩ 1/16W J 3kΩ 1/16W J
C6515 C6516	QETN1EM-476Z NCF31CZ-104X	E CAPACITOR C CAPACITOR	47uF 25V M 0.1uF 16V Z	R1155 R1501	NRSA63J-392X NRSA63J-682X	MG RESISTOR MG RESISTOR	3.9kΩ 1/16W J 6.8kΩ 1/16W J
C6517	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	R1502	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C6518 C6519	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	R1503 R1504	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C6520	QETN1HM-475Z QETN1HM-105Z	E CAPACITOR E CAPACITOR	4.7uF 50V M 1uF 50V M	R1504 R1505	NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
C6521 C6522	NCF31CZ-104X	C CAPACITOR E CAPACITOR	0.1uF 16V Z	R1506	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C6523	QETN1HM-475Z QETN1HM-475Z	E CAPACITOR E CAPACITOR	4.7uF 50V M 4.7uF 50V M	R1511 R1514	NRSA63J-102X NRSA63J-102X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 1kΩ 1/16W J
C6531 C6532	QETN1HM-105Z QETN1HM-105Z	E CAPACITOR E CAPACITOR	1uF 50V M 1uF 50V M	R1515 R1516	NRSA63J-221X NRSA63J-682X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 6.8kΩ 1/16W J
C6533	QETN1EM-476Z	E CAPACITOR	47uF 25V M	R1517	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C6534 C6535 C6541	NDC31HJ-100X NDC31HJ-100X	C CAPACITOR C CAPACITOR	10pF 50V J 10pF 50V J	R1518 R1519	NRSA63J-682X NRSA63J-221X	MG RESISTOR MG RESISTOR	6.8kΩ 1/16W J 220Ω 1/16W J
C6541	QETN1EM-476Z	E CAPACITOR	47uF 25V M	R1520	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C6551 C6552	NCB31CK-683X NCB31CK-683X	C CAPACITOR C CAPACITOR	0.068uF 16V K 0.068uF 16V K	R1521 R1522	NRSA63J-221X NRSA63J-221X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 220Ω 1/16W J
C6553	NCB31CK-683X	C CAPACITOR	0.068uF 16V K	R1523	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C6554 C6555	NCB31CK-683X QETN1HM-106Z	C CAPACITOR E CAPACITOR	0.068uF 16V K 10uF 50V M	R1524 R1525	NRSA63J-221X NRSA63J-102X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 1kΩ 1/16W J
C6555 C6556	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R1526	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C6557 C6561	QETN1EM-476Z QETN1HM-105Z	E CAPACITOR E CAPACITOR	47uF 25V M 1uF 50V M	R1527 R1528	NRSA63J-221X NRSA63J-682X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 6.8kΩ 1/16W J
C6563	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	R1529	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C6571 C6572	NCB11EK-105X NCB11EK-105X	C CAPACITOR C CAPACITOR	1uF 25V K 1uF 25V K	R1530 R1533	NRSA63J-102X NRSA63J-221X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 220Ω 1/16W J
C6573 C6574	NCB11EK-105X	C CAPACITOR	1uF 25V K	R1534	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C6575	NCB11EK-105X NCF31CZ-104X	C CAPACITOR C CAPACITOR	1uF 25V K 0.1uF 16V Z	R1536 R1551	NRSA63J-682X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	6.8kΩ 1/16W J 0Ω 1/16W J
C6576 C6577	NCF31CZ-104X NCF31CZ-104X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 0.1uF 16V Z	R1552 R1553	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
C6578	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	R1555	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C6581	QETN1HM-106Z QETN1EM-476Z	E CAPACITOR E CAPACITOR	10uF 50V M 47uF 25V M	R1557 R1574	NRSA63J-0R0X NRSA63J-101X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 100Ω 1/16W J
C6582 C6583	QETN1HM-105Z	E CAPACITOR	1uF 50V M	R2102	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C6591 C6592	NDC31HJ-101X NDC31HJ-101X	C CAPACITOR C CAPACITOR	100pF 50V J 100pF 50V J	R2103 R2104	NRSA63J-750X NRSA63J-750X	MG RESISTOR MG RESISTOR	75Ω 1/16W J 75Ω 1/16W J
C6593	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R2105	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C6602 C6603	QETN1EM-227Z NCF31CZ-104X	E CAPACITOR C CAPACITOR	220uF 25V M 0.1uF 16V Z	R2106 R2122	NRSA63J-224X NRSA63J-750X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 75Ω 1/16W J
C6604 C6605	QETN1EM-227Z	E CAPACITOR	220uF 25V M	R2123	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C6606	NCF31CZ-104X NCB11EK-105X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 1uF 25V K	R2125 R2126	NRSA63J-750X NRSA63J-224X	MG RESISTOR MG RESISTOR	75Ω 1/16W J 220kΩ 1/16W J
C6607 C6608	NCF31CZ-104X NCF31CZ-104X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 0.1uF 16V Z	R2127 R2144	NRSA63J-224X NRSA63J-750X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 75Ω 1/16W J
C6610	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	R2145	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C6611 C6612	NCB11EK-105X NCF31CZ-104X	C CAPACITOR C CAPACITOR	1uF 25V K 0.1uF 16V Z	R2146 R2251	NRSA63J-224X NRSA63J-680X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 68Ω 1/16W J
C6613	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	R2252	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C6614 C6621	NCF31CZ-104X NCB11EK-105X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 1uF 25V K	R2253 R2254	NRSA63J-222X NRSA63J-223X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 22kΩ 1/16W J
C6622	NCB11EK-105X NCB11EK-105X	C CAPACITOR	1uF 25V K	R2255	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
C6623 C6624	NDC31HJ-121X NDC31HJ-121X	C CAPACITOR C CAPACITOR	120pF 50V J 120pF 50V J	R2259 R2261	NRSA63J-151X NRSA63J-151X	MG RESISTOR MG RESISTOR	150Ω 1/16W J 150Ω 1/16W J
C6641 C6642	NCB21EK-224X NCB21EK-224X	C CAPACITOR C CAPACITOR	0.22uF 25V K 0.22uF 25V K	R2262 R2263	NRSA63J-101X NRSA63J-680X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 68Ω 1/16W J
C6643	NCB21EK-224X	C CAPACITOR	0.22uF 25V K	R2264	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C6644 C6645	NCB21EK-224X NCB31HK-104X	C CAPACITOR C CAPACITOR	0.22uF 25V K 0.1uF 50V K	R2265 R2268	NRSA63J-391X NRSA63J-680X	MG RESISTOR MG RESISTOR	390Ω 1/16W J 68Ω 1/16W J
C6646	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R2269	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J
C6647 C6648	NCF31CZ-104X NCF31CZ-104X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 0.1uF 16V Z	R2270 R2273	NRSA63J-471X NRSA63J-470X	MG RESISTOR MG RESISTOR	470Ω 1/16W J 47Ω 1/16W J
C6701	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	R2274	NRSA63J-470X	MG RESISTOR MG RESISTOR	47Ω 1/16W J
C6702 C6704	NCF31CZ-104X NCB11EK-105X	C CAPACITOR C CAPACITOR	0.1uF 16V Z 1uF 25V K	R2275 R2276	NRSA63J-470X NRSA63J-101X	MG RESISTOR	47Ω 1/16W J 100Ω 1/16W J
C6705	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R2277 R2278	NRSA63J-102X NRSA63J-393X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 39kΩ 1/16W J
R1102	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R2281	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
R1103 R1107	NRSA63J-221X NRSA63J-333X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 33kΩ 1/16W J	R2282 R2283	NRSA63J-470X NRSA63J-470X	MG RESISTOR MG RESISTOR	47Ω 1/16W J 47Ω 1/16W J
R1111	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R2284	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R1112 R1120	NRSA63J-101X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 0Ω 1/16W J	R2286 R2288	NRSA63J-333X NRSA63J-563X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 56kΩ 1/16W J
R1126	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R6101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1131 R1132	NRSA63J-103X NRSA63J-273X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 27kΩ 1/16W J	R6102 R6103	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1133 R1141	NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 47kΩ 1/16W J	R6104	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R1144	NRSA63J-473X NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R6105 R6106	NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1145 R1146	NRSA63J-221X NRSA63J-105X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 1MΩ 1/16W J	R6107 R6108	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R1147	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	R6401	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R1148 R1149	NRSA63J-123X NRSA63J-682X	MG RESISTOR MG RESISTOR	12kΩ 1/16W J 6.8kΩ 1/16W J	R6402 R6403	NRSA63J-103X NRSA63J-822X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 8.2kΩ 1/16W J
-	· -	-	-		-		

ÆRef No.	Part No.	Part Name	Description Loc
R6404	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
R6406	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6407	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6408	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
R6409	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R6508	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6509 R6510	NRSA63J-222X NRSA63J-222X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 2.2kΩ 1/16W J
R6511	NRSA63J-222X NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6512	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R6513	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R6514	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6515	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6517	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6518 R6531	NRSA63J-103X NRSA63J-104X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 100kΩ 1/16W J
R6532	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R6533	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6534	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6535	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R6536	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R6541 R6551	NRSA63J-562X NRSA63J-184X	MG RESISTOR MG RESISTOR	5.6kΩ 1/16W J 180kΩ 1/16W J
R6552	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J
R6553	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J
R6554	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J
R6555	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R6556	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R6557 R6558	NRSA63J-223X NRSA63J-223X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 22kΩ 1/16W J
R6559	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6560	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6561	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J
R6562	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6563	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
R6564 R6565	NRSA63J-0R0X NRSA63J-823X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 82kΩ 1/16W J
R6571	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R6572	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R6573	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R6574	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R6575 R6576	NRSA63J-822X NRSA63J-822X	MG RESISTOR MG RESISTOR	8.2kΩ 1/16W J 8.2kΩ 1/16W J
R6577	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
R6578	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
R6579	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6581 R6582	NRSA63J-563X NRSA63J-563X	MG RESISTOR MG RESISTOR	56kΩ 1/16W J 56kΩ 1/16W J
R6583	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R6584	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6585	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R6586	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R6587 R6588	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R6591	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R6592	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R6593	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6594	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6597 R6601	NRSA63J-103X NRSA63D-822X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 8.2kΩ 1/16W D
R6604	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6606	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6621	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R6622	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R6623	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6624 R6641	NRSA63J-473X QRK126J-100X	MG RESISTOR	47kΩ 1/16W J 10Ω 1/2W J
R6642	QRK126J-100X QRK126J-100X	UNF C RESISTOR UNF C RESISTOR	10Ω 1/2W J 10Ω 1/2W J
R6701	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6702	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6703	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6704	NRSA63J-472X	MG RESISTOR MG RESISTOR	4.7kΩ 1/16W J 100Ω 1/16W J
R6705 R6706	NRSA63J-101X NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6708	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6709	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6710	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6724 R6725	NRSA63J-103X NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 10kΩ 1/16W J
R6727	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J
R6728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6729	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R6730 R6731	NRSA63J-563X NRSA63J-103X	MG RESISTOR MG RESISTOR	56kΩ 1/16W J 10kΩ 1/16W J
R6732	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6733	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J

⚠Ref No. Part No. Part No.		Part Name	Name Description L		
R6734 R6735	NRSA63J-561X NRSA63J-561X	MG RESISTOR MG RESISTOR	560Ω 1/16W J 560Ω 1/16W J		
L1102 L1591 L1593 L6641 L6642 L6643 L6644	QRN143J-0R0X QQL26AK-330Z QQL26AK-220Z QQL28AM-100 QQL28AM-100 QQL28AM-100 QQL28AM-100	C RESISTOR COIL COIL COIL COIL COIL COIL COIL COIL	0Ω 1/4W J 33uH K 22uH K 10uH M 10uH M 10uH M 10uH M		
CN000F	QGA2001C2-04V QGA1501C2-10V QGA1501C2-11V QGA1501C2-07V QGA1501C2-07V QGA1501C2-04V QGA2501C5-06Z QGA1501C2-03V QUB130-16EPFX QND0102-001 QNN0370-001	CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR SIN TWIST WIRE S JACK PIN JACK S JACK PIN JACK PIN JACK PIN JACK FERRITE BEADS	W-B (1-4) W-B (1-10) W-B (1-11) W-B (1-7) W-B (1-4) W-B (1-6) W-B (1-6) W-B (1-3) INPUT-1 S IN INPUT-1 V/L/R IN INPUT-2 S IN INPUT-2 V/L/R IN COMPONENT IN S OUT V/L/R OUT		

FRONT SENSOR SW P.W. BOARD ASS'Y (LCA90155-03B)(SSB-0L286A)

⚠Ref No.	Part No.	Part Name	Description Loc	
IC8752	GP1UM281QK	IR DETECT UNIT	38kHz	
C8752	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
R8756 R8757 R8759	NRSA63J-0R0X NRSA63J-0R0X NRSA63J-102X	MG RESISTOR MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J 1kΩ 1/16W J	
CN8003	QGB2542J1-08	CONNECTOR	B-B (1-8)	

FRONT CONTROL P.W. BOARD ASS'Y (LCA90154-03D)(SSB-0L386A)

▲Ref No.	Part No.	Part Name	Description Local
Q8701	UN2212-X	TRANSISTOR	
Q8702	UN2212-X	TRANSISTOR	
Q8703	2SC3928A/QR/-X	TRANSISTOR	
D6411	MA8062/M/-X	Z DIODE	POWER
D6412	MA8062/M/-X	Z DIODE	
D6413	MA8062/M/-X	Z DIODE	
D8702	HLMPNS30J00-T16	LED	
C6411	QETN1AM-227Z	E CAPACITOR	220uF 10V M
C6412	QETN1AM-227Z	E CAPACITOR	220uF 10V M
C6413	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
C6414	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
R6411	NRSA63J-390X	MG RESISTOR	$\begin{array}{c} 39\Omega\ 1/16W\ J\\ 39\Omega\ 1/16W\ J\\ 39\Omega\ 1/16W\ J\\ 39\Omega\ 1/16W\ J\\ 10K\Omega\ 1/16W\ J\\ 10K\Omega\ 1/16W\ J\\ 100\Omega\ 1/16W\ J\\ 5.6k\Omega\ 1/16W\ J\\ 15k\Omega\ 1/16W\ J\\ \end{array}$
R6412	NRSA63J-390X	MG RESISTOR	
R6413	NRSA63J-390X	MG RESISTOR	
R6414	NRSA63J-103X	MG RESISTOR	
R6415	NRSA63J-103X	MG RESISTOR	
R6416	NRSA63J-101X	MG RESISTOR	
R6417	NRSA63J-101X	MG RESISTOR	
R8701	NRSA63J-562X	MG RESISTOR	
R8702	NRSA63J-153X	MG RESISTOR	

⚠Ref No.	Part No.	Part Name	Description Local
R8703 R8704 R8712 R8713 R8714	NRSA63J-562X NRSA63J-153X NRSA63J-102X NRSA63J-222X NRSA63J-223X	MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR	5.6kΩ 1/16W J 15kΩ 1/16W J 1kΩ 1/16W J 2.2kΩ 1/16W J 22kΩ 1/16W J
CN3003 CN300T CN300U J6401 S8701 S8702 S8703 S8704 S8705 S8706 S8707	QGB2542K1-08 QGA1501C2-10V QGA1501C2-04V QMS3004-C01 QSW0797-001 QSW0797-001 QSW0797-001 QSW0797-001 QSW0797-001 QSW0797-001 QSW0797-001	CONNECTOR CONNECTOR CONNECTOR H.P.JACK TACT SWITCH	B-B (1-8) W-B (1-10) W-B (1-4) HEADPHONE VOL+ VOL- CH+ CH- INPUT MENU POWER

MI-CON & DIST MODULE P.W. BOARD ASS'Y (LCA10291-06A)(SSB-0D098A)

⚠Ref No.	Part No.	Part Name	Description Local
MD001 IC704	LCA10291-06A	MI-COM & DIST MODULE PWB IC	(SERVICE)

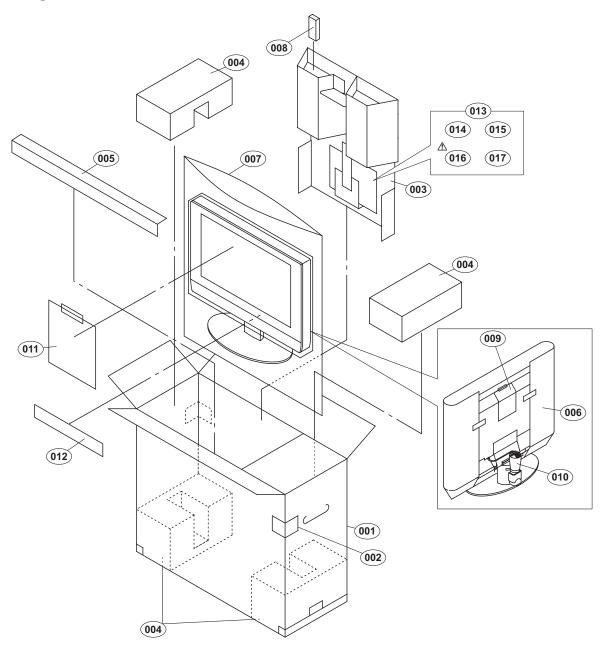
DIGITAL INPUT MODULE P.W. BOARD ASS'Y (26WX84KCP-S)

⚠Ref No.	Part No.	Part Name	Description	Local
MD001	26WX84KCP-S	DIGITAL INPUT MODULE PWB		

REMOTE CONTROL UNIT PARTS LIST (RM-C13G-1H)

⚠Ref No. Part No.		Part Name	Description Local	
	R25-8173	BATTERY COVER		

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	001	LC10006-027C	PACKING CASE		
	002	GG20025-001A-H	CORNER LABEL	(x2)	
	003	LC21411-001A	CUSHION		
	004	LC11697-001B	CUSHION ASSY	4pcs in 1set	
	005	LC41553-002A	TOP PAD		
	006	LC41664-001A	SET COVER		
	007	CP30974-005	POLY BAG		
	008	RM-C13G-1H	REMOCON UNIT	Inc.POLY BAG	
	009	LCT1623-001A	CAUTION SHEET		
	010	QPH02002005	POLY SHEET	20cm x 20cm	
	011	LCT1624-001A	INST SHEET		
	012	LC41748-001A	CARTON SHEET		
	013	QPA02503505P	POLY BAG	25cm x 35cm	
	014		BATTERY	R6P/AA(x2)	
^	015	BT-56013-1	WARRANTY CARD		
⚠	016	LCT1622-001A	INST BOOK		
	017	LCT1625-001A	INST SHEET		

JVC

SCHEMATIC DIAGRAMS

LCD FLAT TELEVISION

LT-26WX84/K

CD-ROM No.SML200404

BASIC CHASSIS
SB5







LT-26WX84/K

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the A symbol and shading are critical for safety. For continued safety replace safety ciritical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal : Colour bar signal

(2) Setting positions of each knob/button and

: Original setting position variable resistor

when shipped

(3)Internal resistance of tester : DC 20kΩ/V

(4)Oscilloscope sweeping time : H \Rightarrow 20µs / div

5ms / div

: Othters \Rightarrow Sweeping time is

specified

(5) Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

In the PW board : R1209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM (1)Resistors

Resistance value

No unit $: [\Omega]$:[kΩ] : [M Ω]

Rated allowable power

No indication : 1/16 [W] Others : As specified

Type

No indication : Carbon resistor

OMR : Oxide metal film resistor **MFR** : Metal film resistor **MPR** : Metal plate resistor **UNFR** : Uninflammable resistor

: Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

Capacitance value

1 or higher : [pF] less than 1 : [µF]

Withstand voltage

No indication : DC50[V]

Others : DC withstand voltage [V] AC indicated : AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [µF]/withstand voltage[V]

Type

No indication : Ceramic capacitor MM Metalized mylar capacitor PP : Polypropylene capacitor

MPP : Metalized polypropylene capacitor

MF : Metalized film capacitor TF : Thin film capacitor RΡ : Bipolar electrolytic capacitor TAN

(3)Coils

: [µH] No unit

Others : As specified

(4)Power Supply



: Tantalum capacitor

*Respective voltage values are indicated

(5)Test point



(6)Connecting method



(7)Ground symbol

: ISOLATED(NEUTRAL) side ground

: EARTH ground : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE $: (\bot)$ side GND and the ISOLATED(NEUTRAL): (___) side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.
- Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

◆ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

No.YA089 2-1

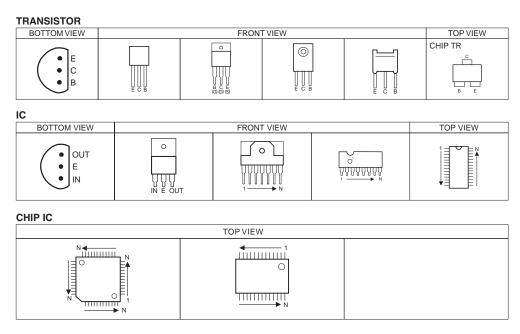
CONTENTS

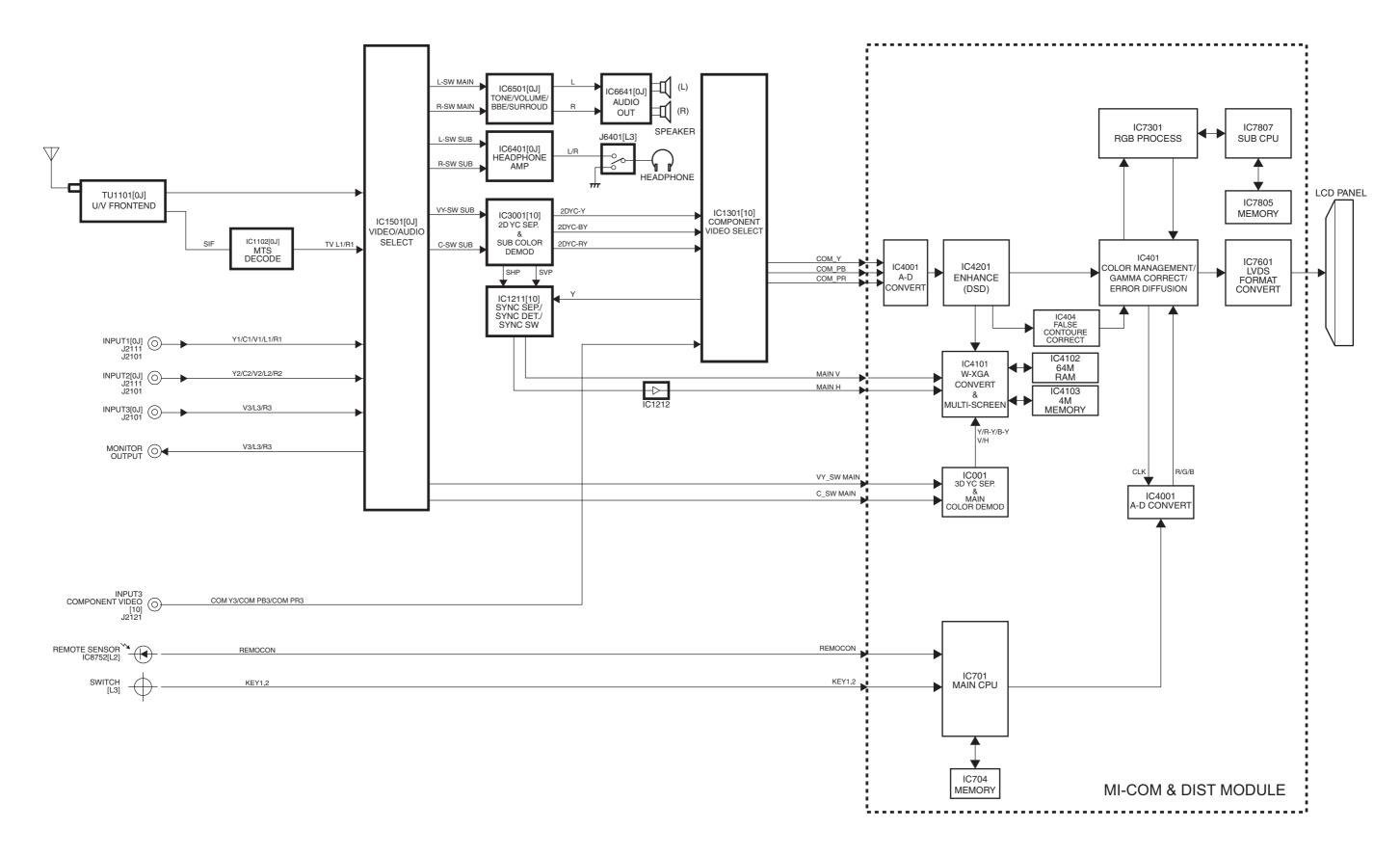
SEMICONDUCTOR SHAPES	2-2
BLOCK DIAGRAM	2-3
CIRCUIT DIAGRAMS	2-5
RECEIVER PWB CIRCUIT DIAGRAM	
VIDEO PWB CIRCUIT DIAGRAM	2-11
POWER PWB CIRCUIT DIAGRAM	
REGURATOR PWB CIRCUIT DIAGRAM	
FRONT SENSOR PWB CIRCUIT DIAGRAM	2-21
FRONT CONTROL PWB CIRCUIT DIAGRAM	2-23
PATTERN DIAGRAMS	2-25
RECEIVER PWB PATTERN	2-25
VIDEO PWB PATTERN	
POWER PWB PATTERN	
REGURATOR PWB PATTERN	2-33
FRONT SENSOR PWB PATTERN	2-34
FRONT CONTROL PWB PATTERN	2-34
VOLTAGE CHARTS	2-35

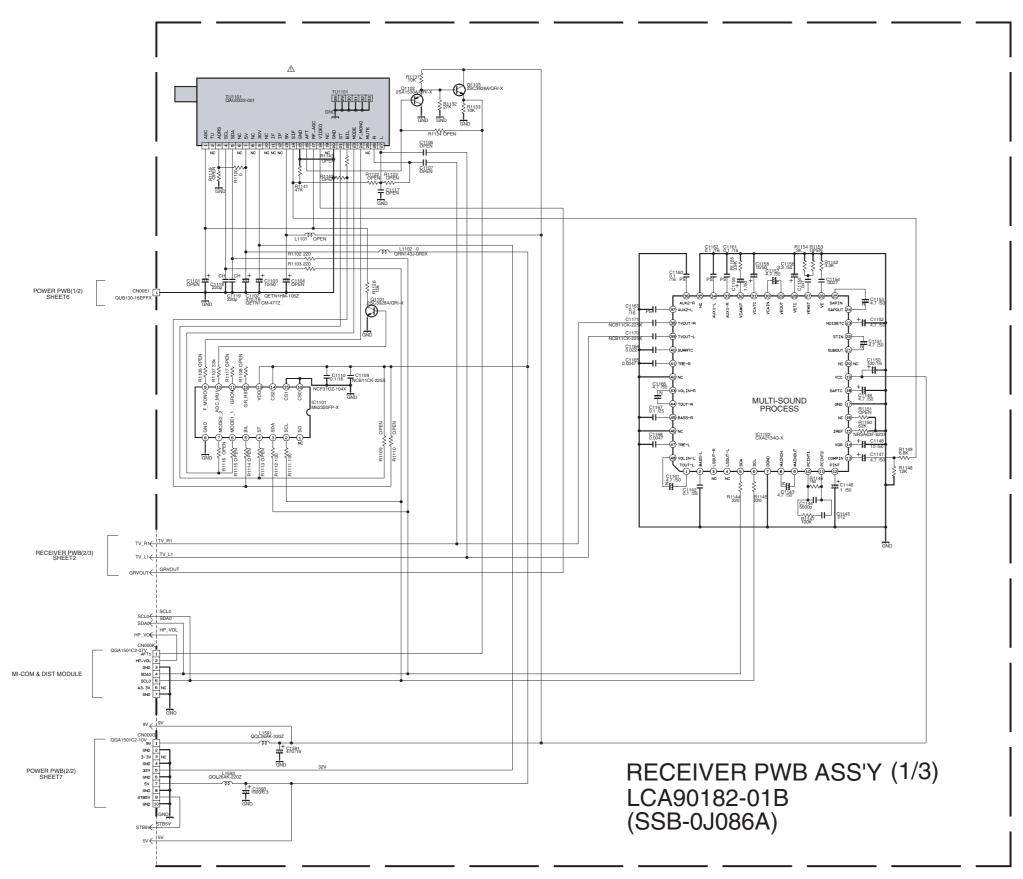
USING P.W. BOARD

PWB ASS'Y name	PWB AS	SS'Y No.
RECEIVER P.W. BOARD	LCA90182-01B	SSB-0J086A
VIDEO P.W. BOARD	LCA90152-03C	SSB-1086A
POWER P.W. BOARD	LCA90149-03F	SSB-9086A
REGURATOR P.W. BOARD	LCA90150-03D	SSB-9186A
FRONT SENSOR P.W. BOARD	LCA90155-03B	SSB-0L286A
FRONT CONTROL P.W. BOARD	LCA90154-03D	SSB-0L386A

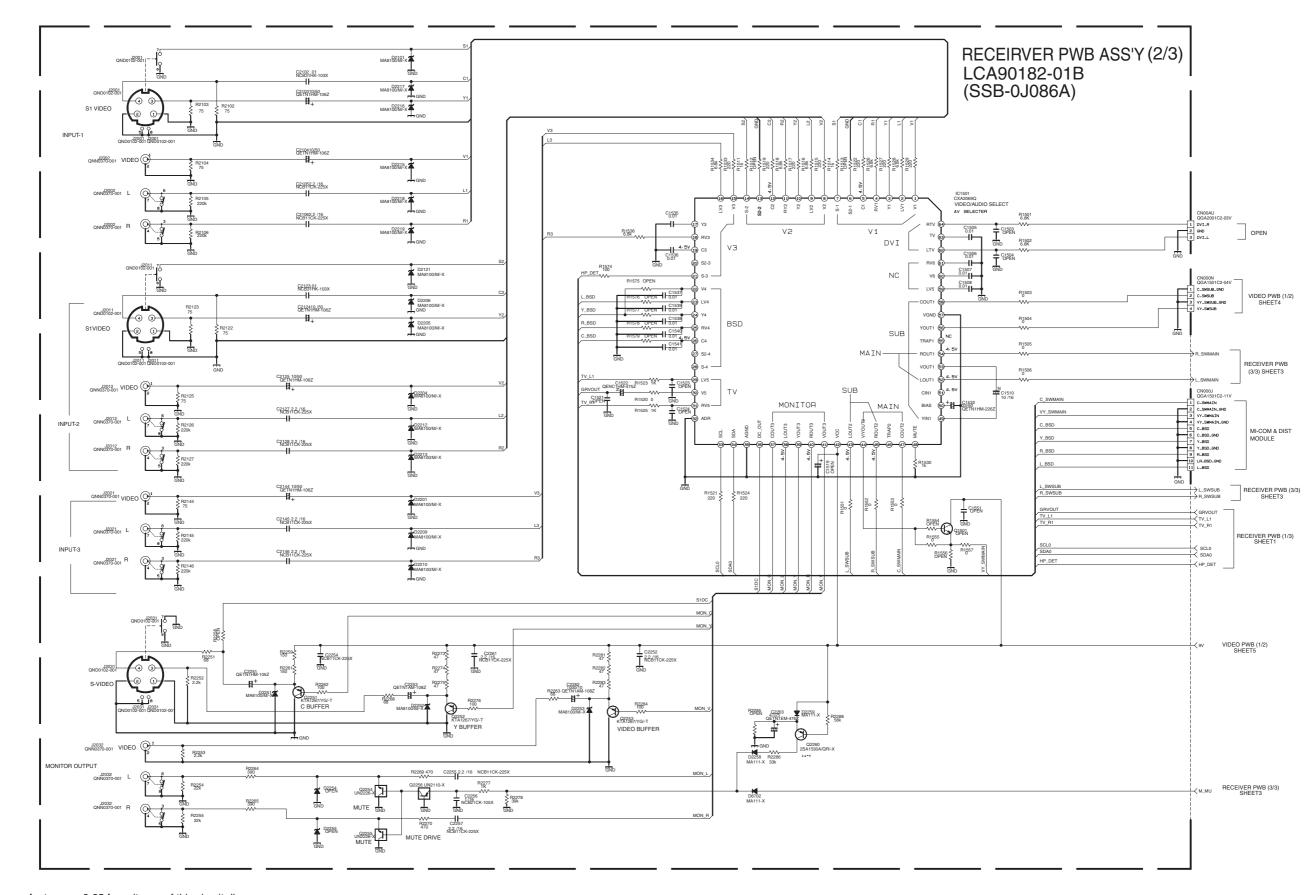
SEMICONDUCTOR SHAPES



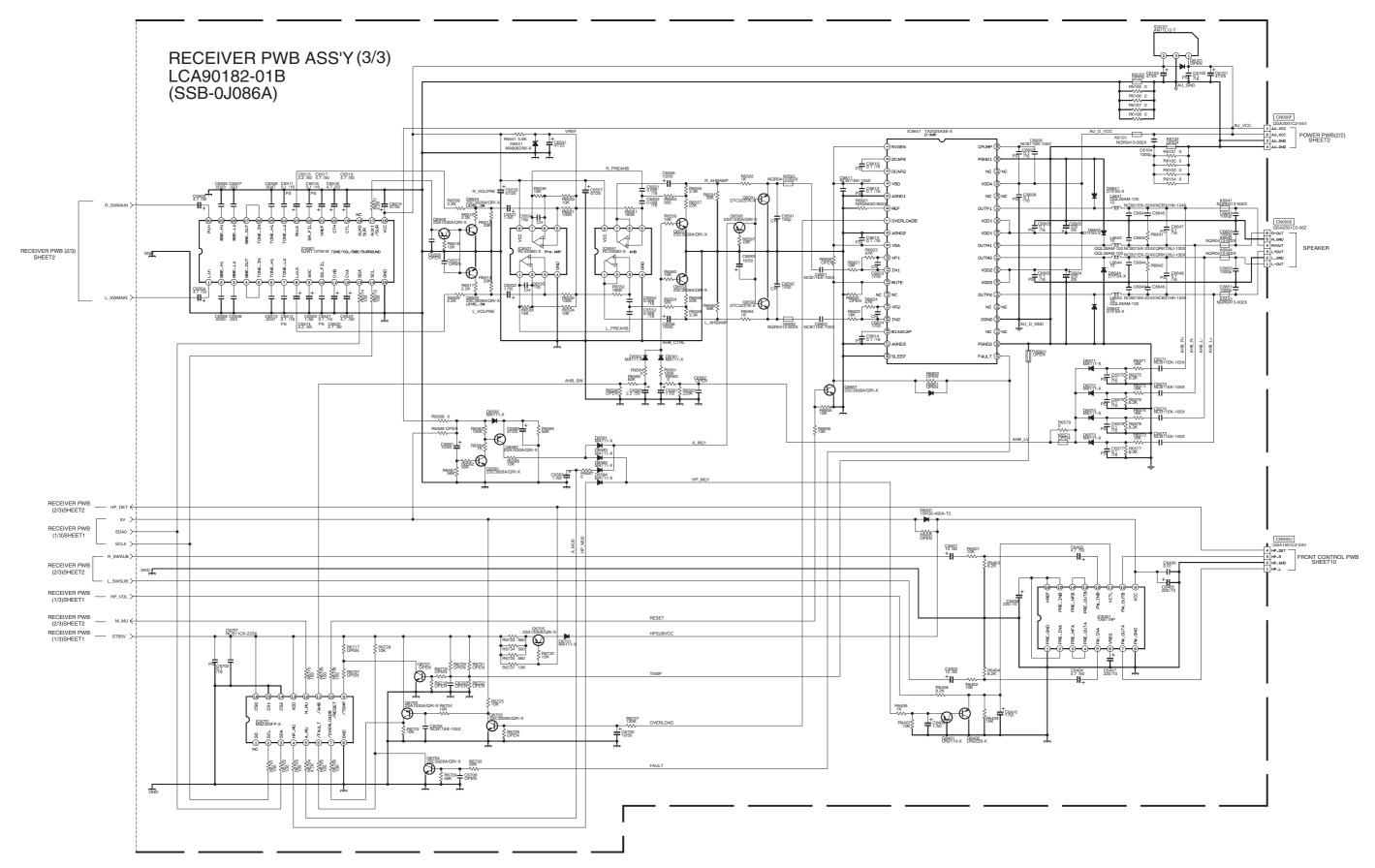




NOTES) 1.Please refer to page 2-35 for voltages of this circuit diagram. 2.Please refer to page 2-36 for waveforms of this circuit diagram.

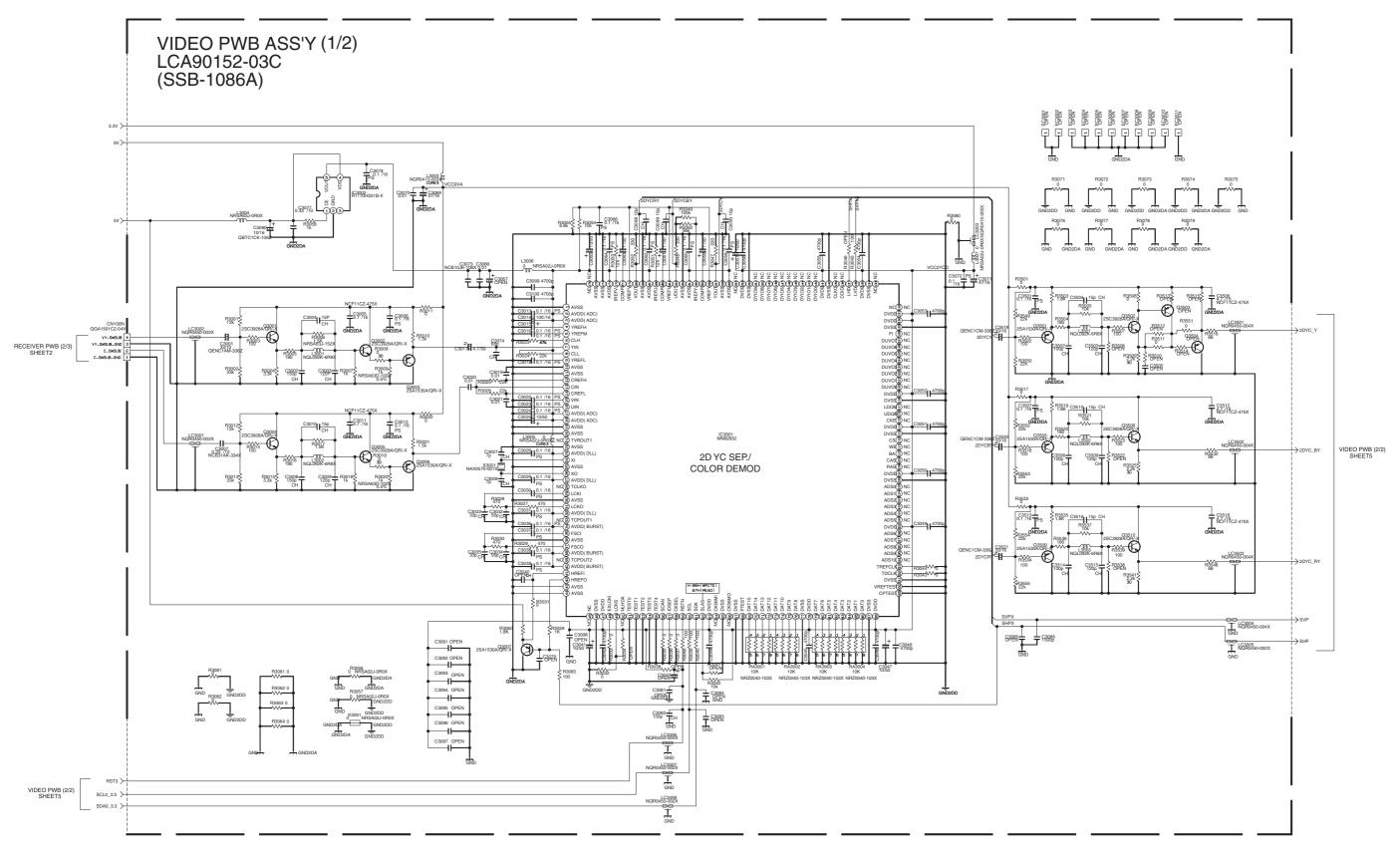


NOTES) 1.Please refer to page 2-35 for voltages of this circuit diagram. 2.Please refer to page 2-36 for waveforms of this circuit diagram.

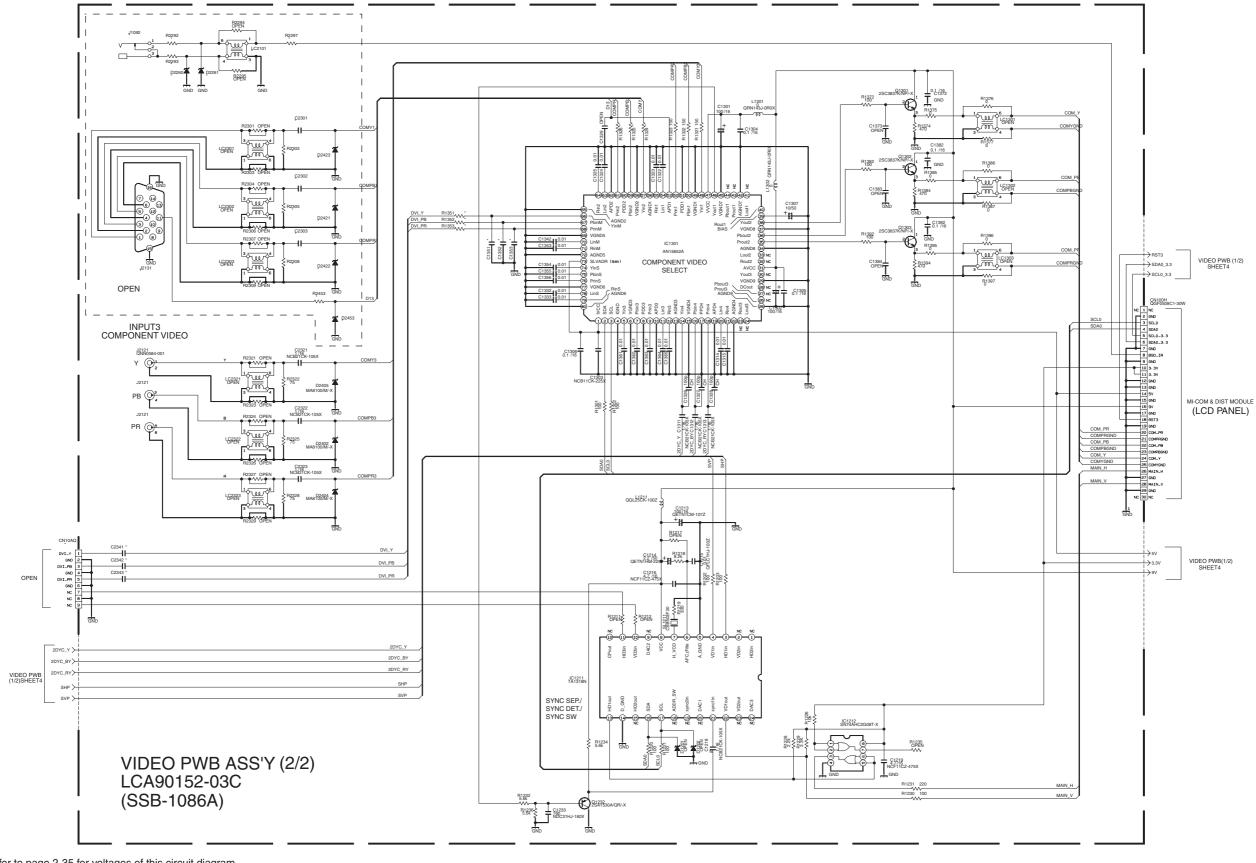


NOTES) 1.Please refer to page 2-36 for waveforms of this circuit diagram.

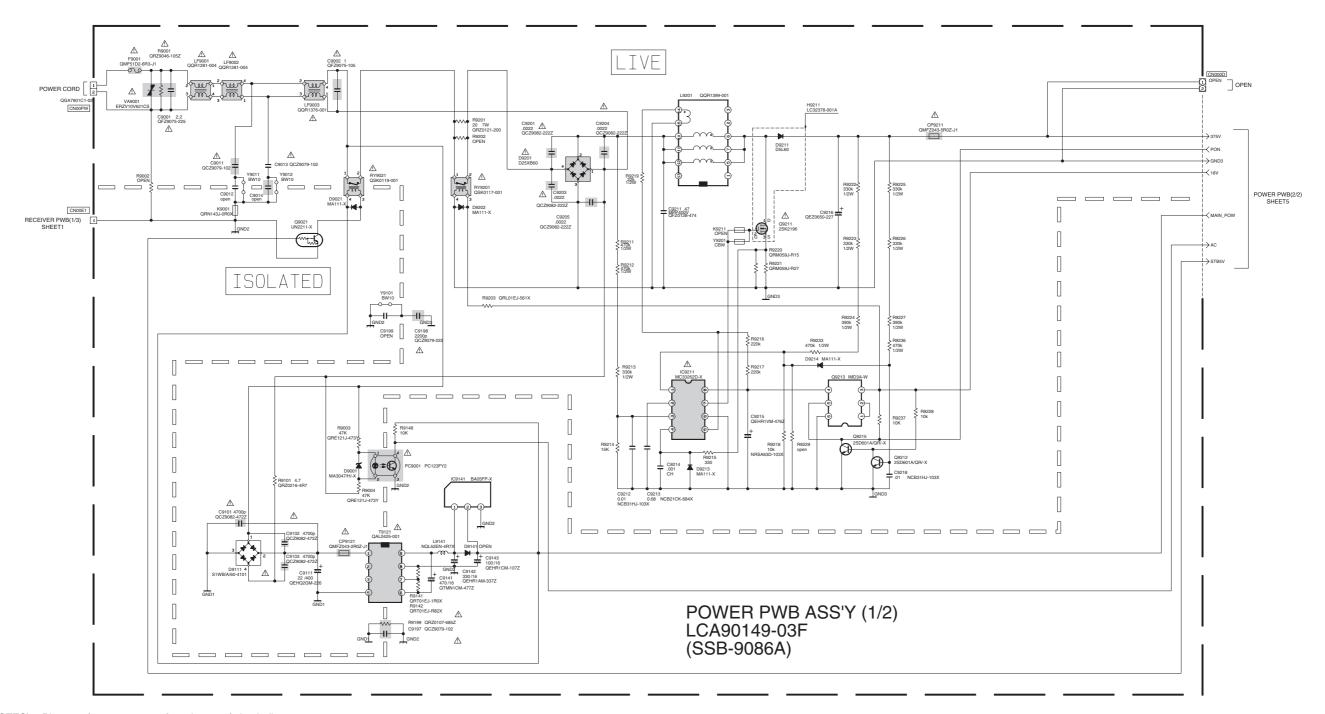
No.YA089 2-9 2-10 No.YA089



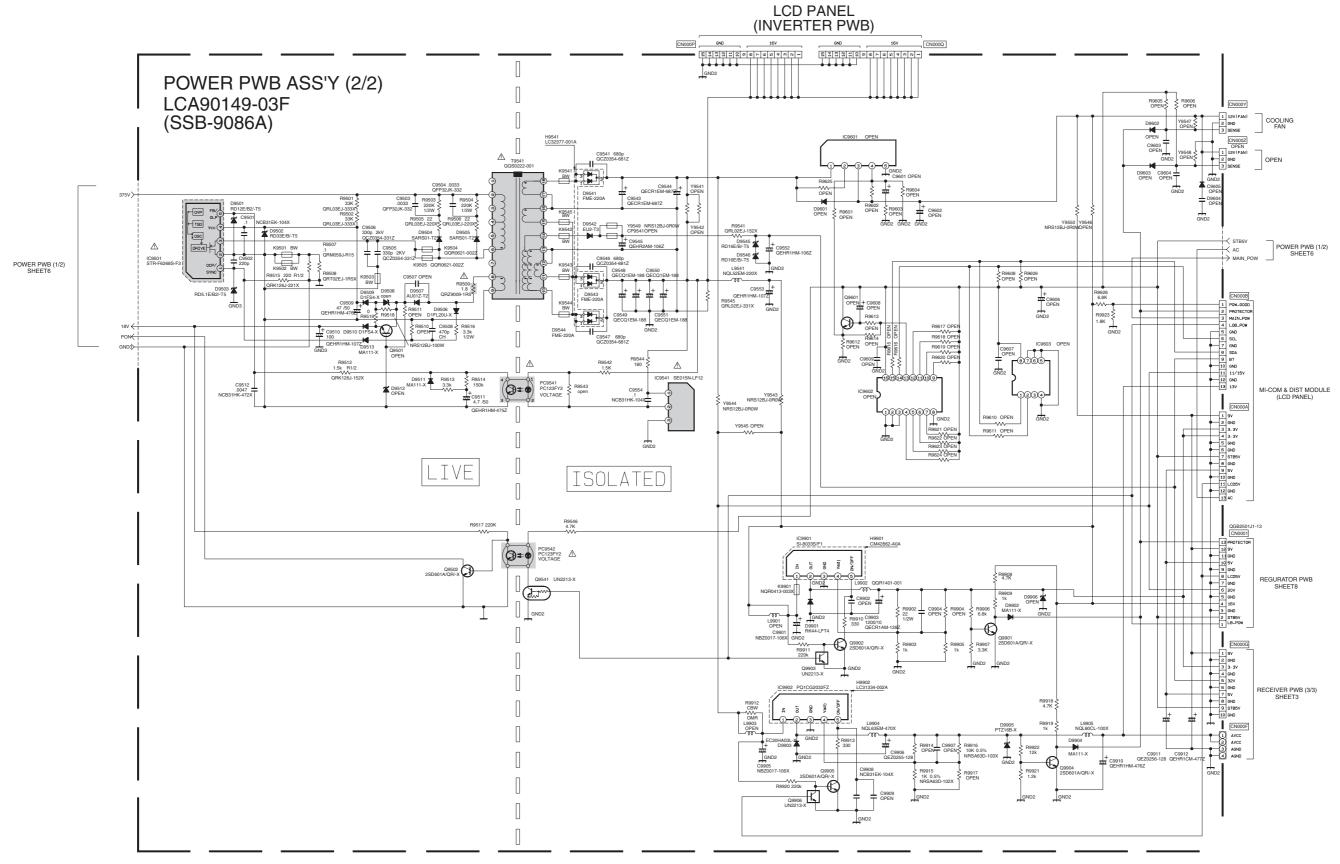
NOTES) 1.Please refer to page 2-35 for voltages of this circuit diagram. 2.Please refer to page 2-36 for waveforms of this circuit diagram.



NOTES) 1.Please refer to page 2-35 for voltages of this circuit diagram. 2.Please refer to page 2-36 for waveforms of this circuit diagram.

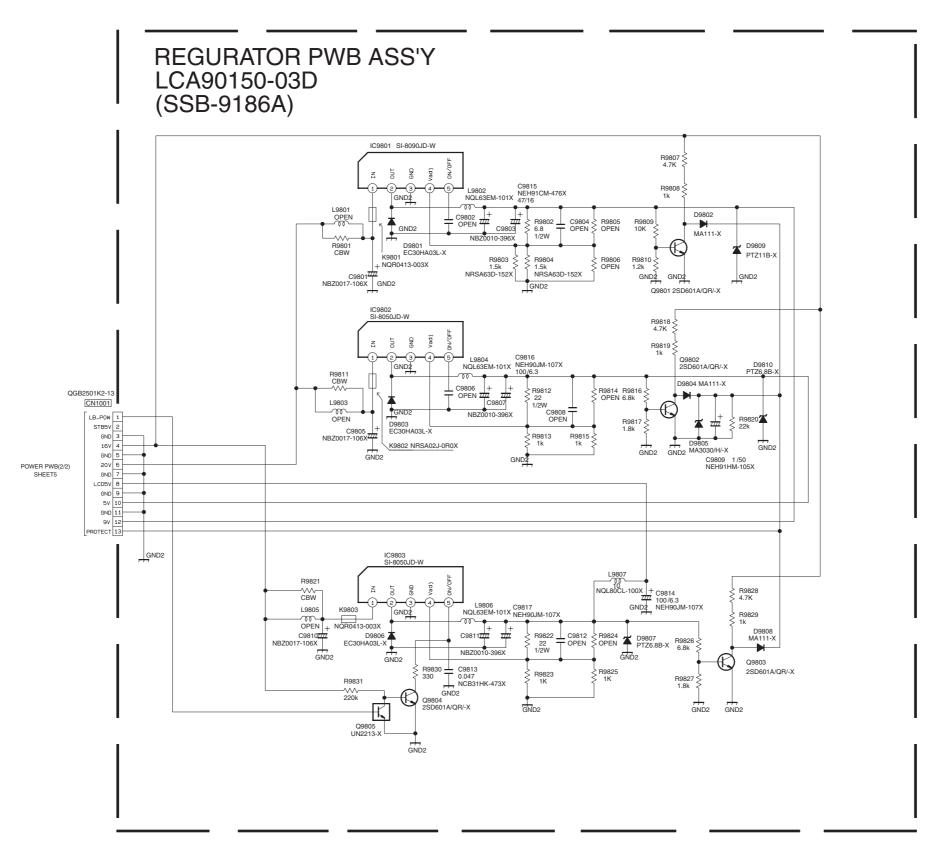


NOTES) 1.Please refer to page 2-35 for voltages of circuit diagram

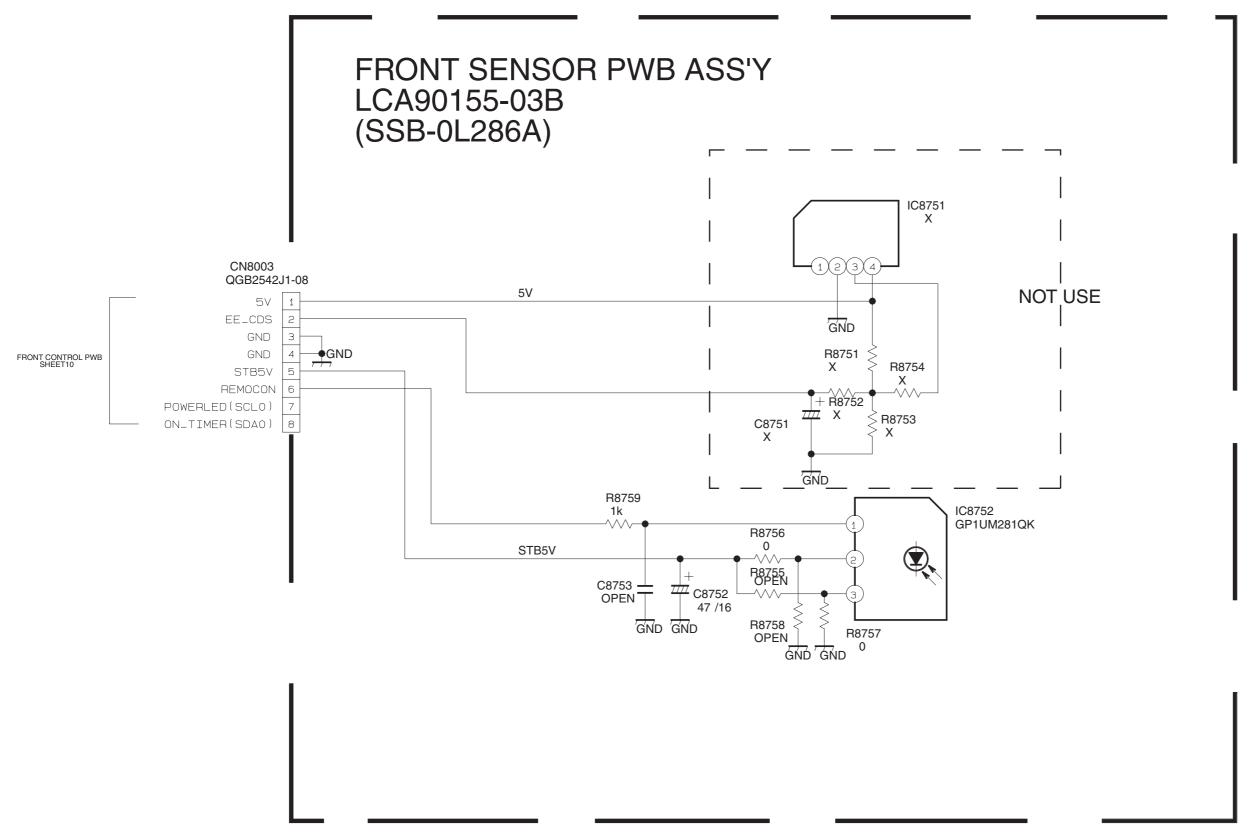


NOTES) 1.Please refer to page 2-35 for voltages of circuit diagram

No.YA089 2-17 2-18 No.YA089

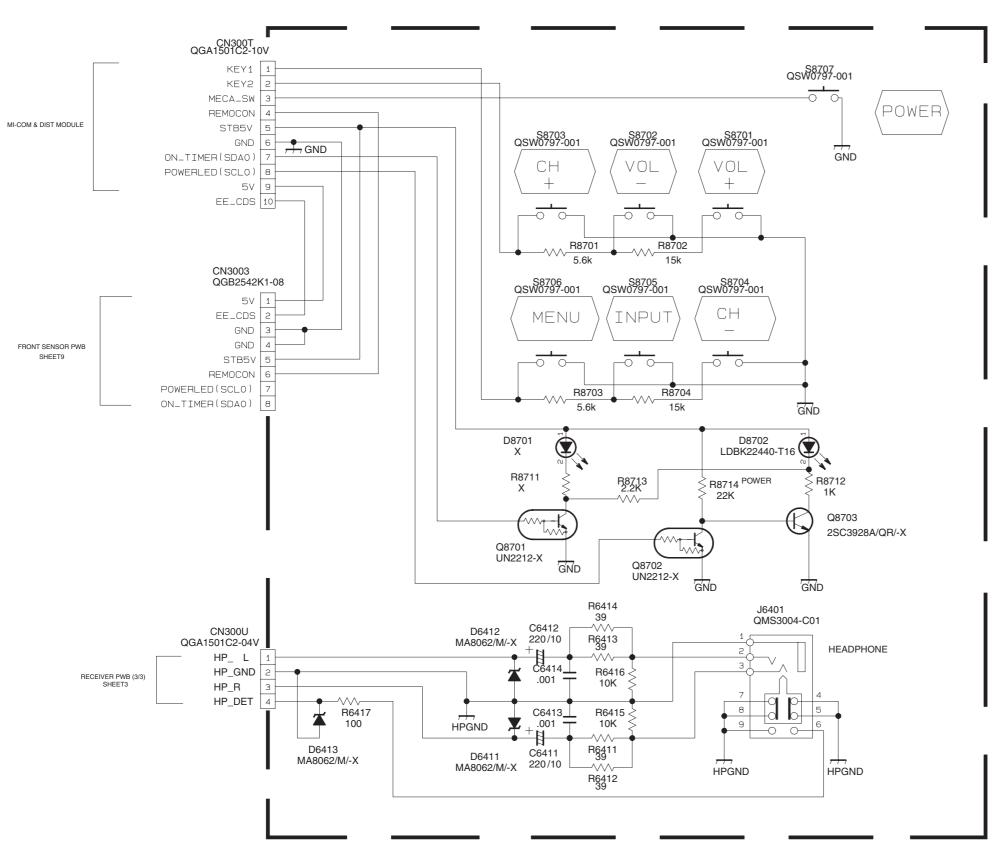


NOTES) 1.Please refer to page 2-35 for voltages of circuit diagram



NOTES) 1.Please refer to page 2-35 for voltages of circuit diagram

No.YA089 2-21 2-22 No.YA089



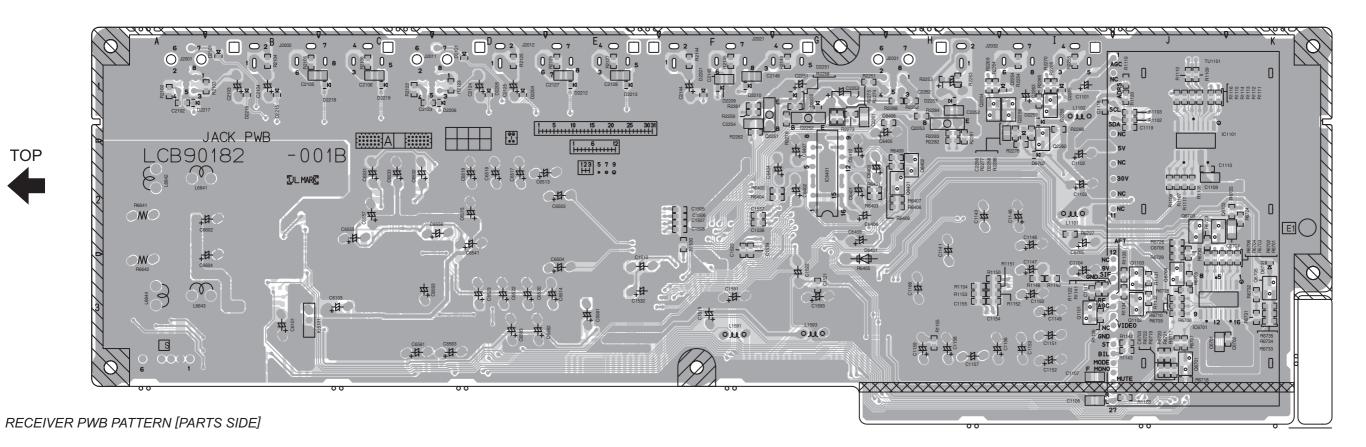
FRONT CONTROL PWB ASS'Y LCA90154-03D (SSB-0L386A)

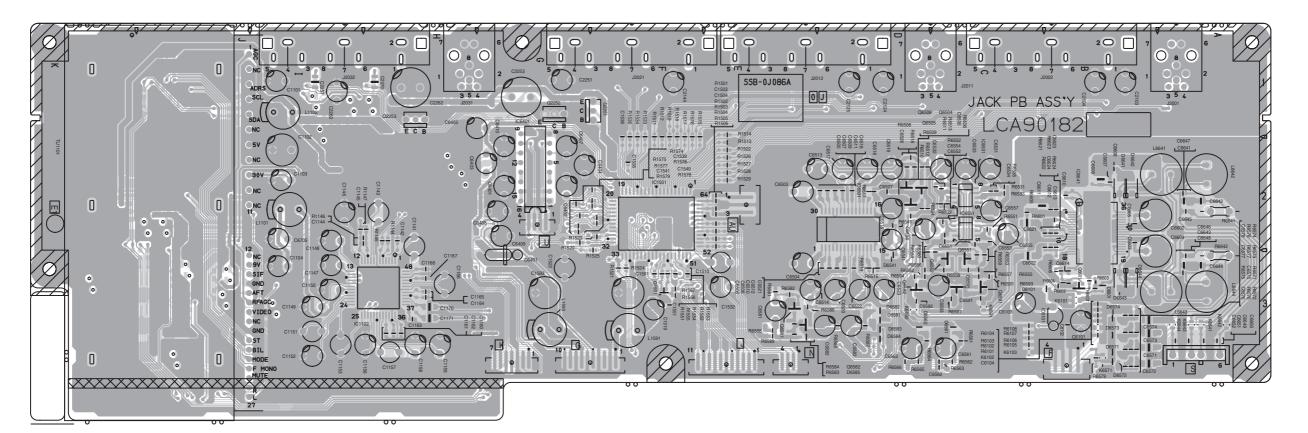
NOTES) 1.Please refer to page 2-35 for voltages of circuit diagram

PATTERN DIAGRAMS

TOP

RECEIVER PWB PATTERN [SOLDER SIDE]

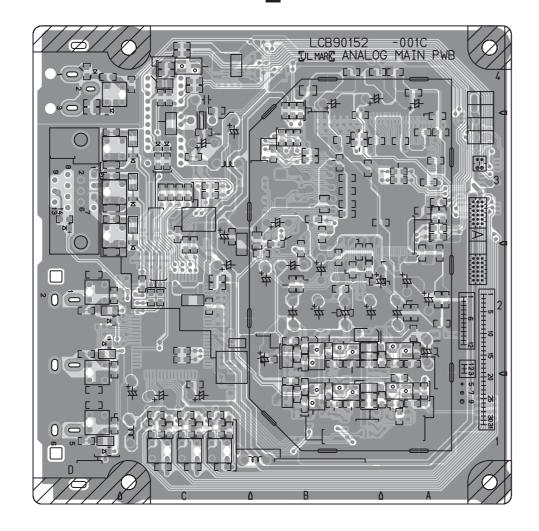




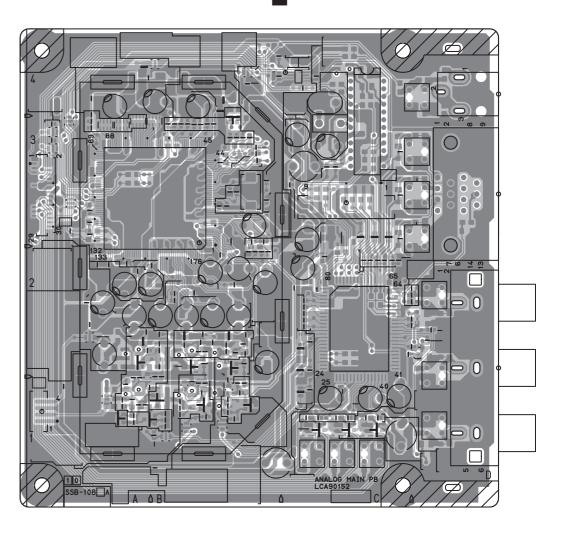


No.YA089 2-25 2-26 No.YA089

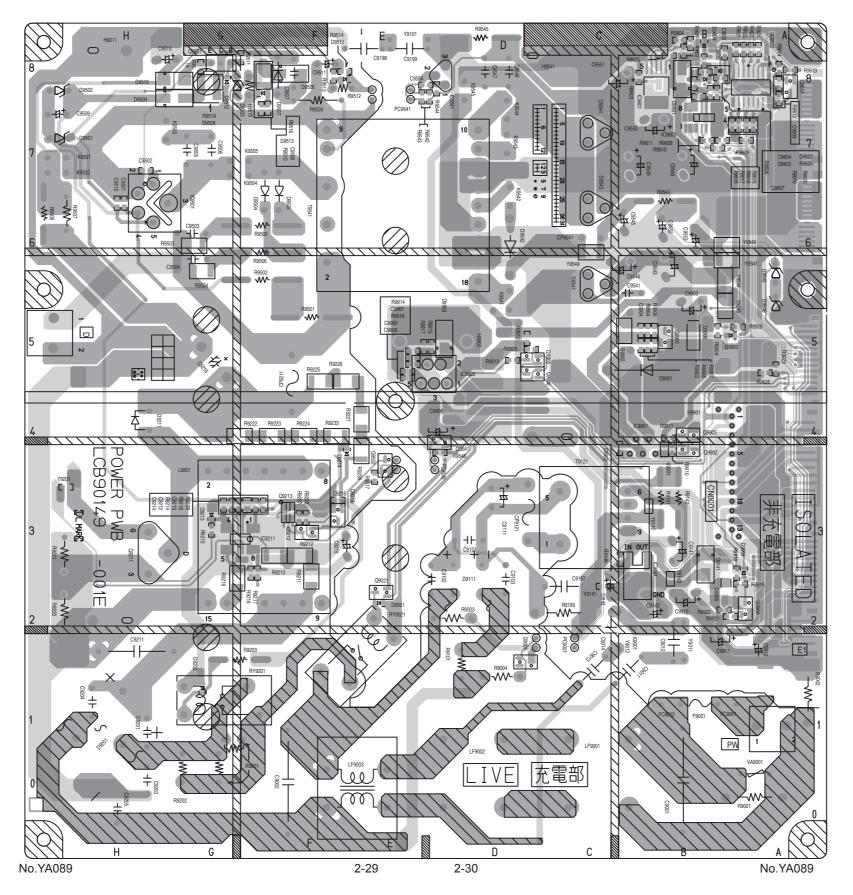




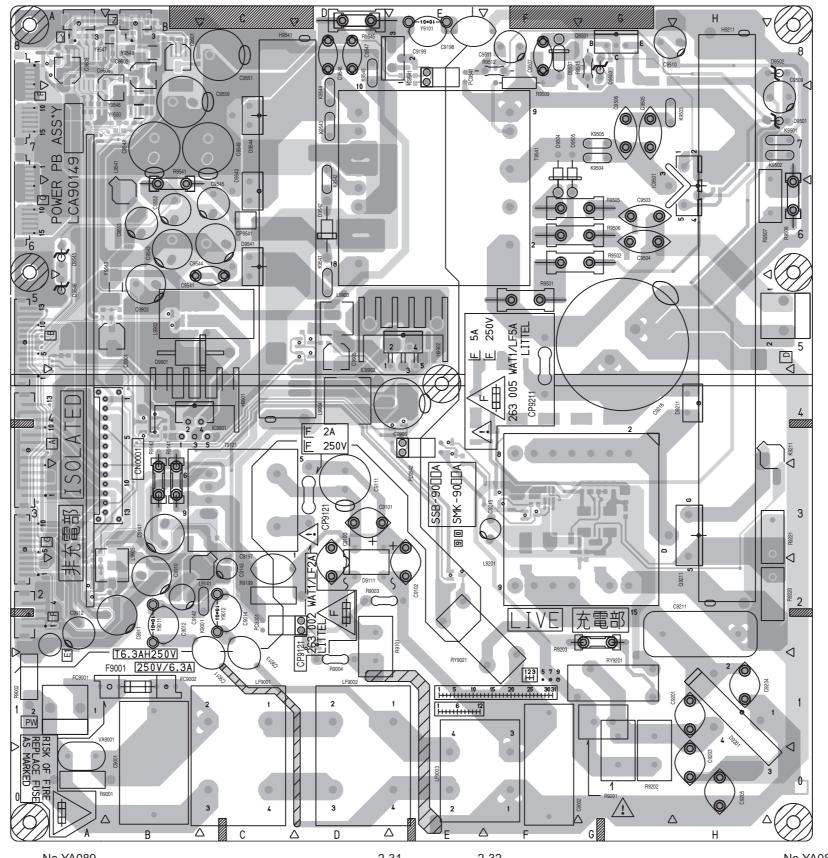


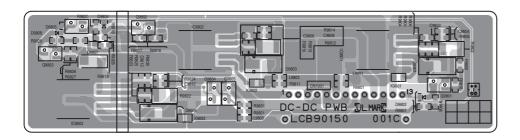






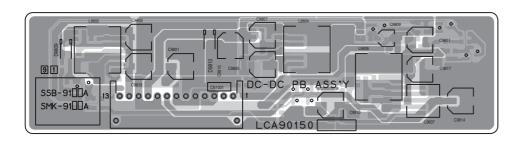




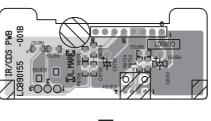




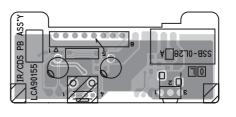
REGURATOR PWB PATTERN [PARTS SIDE]







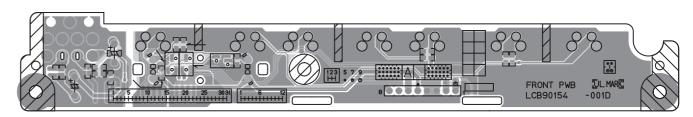




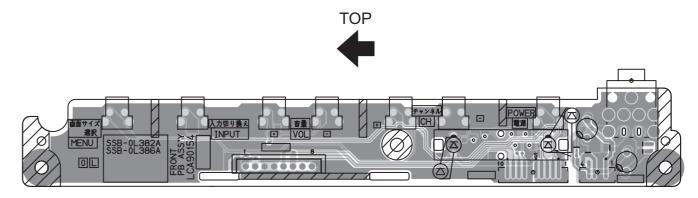


FRONT CONTROL PWB PATTERN [SOLDER SIDE]





FRONT CONTROL PWB PATTERN [PARTS SIDE]



VO	LT	AG
<recei\< th=""><th>/ER></th><th></th></recei\<>	/ER>	
MODE	DC (V)	MO
PIN NO.	DC (V)	PII
IC1101		
1	0	
2	4.2	
3	3.0	
4	0.5	
5	0.5	-
		l
6	0.5	l
7	0.5	
8	0	
9	0.5	CN
10	0	
11	0.5	
12	0.5	
13	5.2	
14	5.2	
15	0	
16	0	1 -
IC1102	- 0	-
	4.0	
1	4.2	[SF
2	4.2	MC
3	4.1	PII
4	4.1	IC
5	2.9	
6	4.2	
7	0	
8	4.1	1 -
9	0	-
10	4.1	
11	4.0	L
12	5.3	
13	4.1	
14	1.3	
15	1.3	
16	0	l
	0	l
17		l
18	3.1	_
19	9.0	
20	0	
21	4.1	
22	4.1	
23	4.2	
24	3.9	
		-
25	4.1	
26	4.0	
27	4.1	
28	1.7	
29	4.1	
30	4.1	
31	1.7	
32	4.0	l
		-
33	4.1	
34	4.1	
35	0	
36	4.1	
37	4.1	
38	4.1	
39	4.1	
40	4.1	H
	4.1	
41	4.1	
42	0	
43	4.1	
44	0	
45	4.2	
46	0	
47	4.2	
48	4.1	
Q1101	7.1	-
	_	
C	0	
	4.2	
В	0	
Q1102		
E	5.4	
С	0	
В	4.8	
Q1103		
E	4.8	
C	9.0	-
В		-
	5.4	-
TU1101		
1	4.2	
2	5.8	
3	5.2	
4	4.3	
5	3.0	
6	0.0	1 —
		-
7	5.2	
8	0	Q
9	31.9	L
10	0	
11	0	
12	0	Q
13	0	"
		-
14	2.4	-
15	0	
16	4.8	Q
17	4.2	
18	2.5	

IODE IN NO.	DC (V)	MODE PIN NO.	DC (V)	MODE PIN NO.	DC (\
19	0	В	3.8	3	6.
20	0	Q2254 F	0.0	5	6.
22	0	C	0.0	6	0.
23	0	В	-0.4	7	6.
24	0	Q2255		8	11.
25	0	E C	0.0	IC6641	5.
26 27	0	В	-0.2	2	0.
N000K	_	Q2256		3	6.
1	4.8	E	0.0	4	5.
3	0	В	-0.2 0.0	5 6	0. 1.
4	2.9	Q2260	0.0	7	4.
5	4.3	E	9.0	8	0.
6	3.3	С	-0.3	9	5.
7	0	B CN000J	8.9	10	2.
	.,	1	4.4	12	0.
HEET2 ODE		2	0	13	0.
N NO.	DC (V)	3	4.3	14	2.
1501		4	0	15	2.
1	4.3	5	0	16	2.
2	4.5	6	0	17	0.
3	4.0	8	0	18	0.
5	4.4	9	0	20	0.
6	0	10	0	21	0.
7	5.0	11	0	22	0.
8	4.0			23	0.
9	4.5	[SHEET:	3]	24 25	7.
10	3.9 4.5	MODE PIN NO.	DC (V)	26	13.
12	4.4	IC6101		27	13.
13	0	1	11.9	28	6.
14	5.0	2	0.0	29	9.
15	3.9	3 IC6401	13.9	30	13.9
16 17	4.5	1	0.0	32	0.
18	3.9 4.5	2	2.0	33	13.
19	4.4	3	1.9	34	0.0
20	0.1	4	1.9	35	0.0
21	5.1	5	2.0	36	22.
22	3.9	7	3.8 1.9	IC6701	0.0
23	4.5	8	0.0	2	4.
25	4.5	9	4.5	3	4.
26	4.4	10	1.9	4	5.
27	0	11	0.0	5	0.
28	5.0	12	1.9	7	5.
29	4.5	14	1.9	8	0.
30	5.5 4.4	15	1.9	9	0.
32	0	16	1.9	10	5.
33	4.3	IC6501		11	5.
34	2.9	1	5.9	12	0.
35	0	3	6.0	13	5.
36	0	4	6.0 5.9	15	0.
37 38	4.4	5	5.9	16	5.
39	3.7	6	6.0	Q6401	
40	4.5	7	5.9	E	3.
41	3.7	8	6.0	С	3.
42	9.0	10	0.9 6.0	B Q6402	0.
43 44	4.5	11	3.0	E	0.0
45	4.5	12	2.9	C	0.0
46	3.7	13	4.1	В	3.
47	4.4	14	4.2	Q6504	_
48	0	15 16	11.9	E C	0.
49 50	3.9 4.5	17	4.5	В	0.
51	4.4	18	0.0	Q6505	
52	4.5	19	5.3	E	0.
53	3.7	20	5.2	С	0.
54	4.5	21	5.9	B Q6506	0.
55 56	3.7	23	6.0	Q6506 E	0.8
56 57	3.2	24	6.0	C	0.
58	4.3	25	6.0	В	0.
59	4.5	26	6.0	Q6551	
60	3.9	27	6.0	E	0.
61	4.5	28	6.0	C	0.
62	4.5	29 30	6.0	B Q6552	0.
63	3.9	IC6531	0.0	Q0552	0
2251	4.4	1	6.2	C	0.
E	5.1	2	6.3	В	0.
С	0.0	3	6.2	Q6581	
В	4.9	4	0.0	E	0.
2252		5	6.2	C	11.
E	4.4	7	6.2	B Q6582	0.0
_				1 000002	
С	0.0				11 -
C B 2253	3.8	8 IC6551	11.9	E	11. -0.

MODE PIN NO.	DC (V)
Е	0.0
С	0.0
В	-0.7
Q6592	
Е	0.0
С	0.0
В	-0.9
Q6593	
Е	0.0
С	-0.8
В	0.0
Q6601	
Е	0.0
С	0.0
В	0.6
Q6702	
Е	5.4
С	5.4
В	4.7
Q6703	
Е	0.0
С	0.0
В	0.6
Q6704	
Е	0.0
С	5.4
В	0.0
Q6705	
Е	5.4
С	0.0
В	5.3

<video: SHEET</video: 		[SI	IEET!	5]
MODE PIN NO.	DC (V)		DDE N NO.	DC (V)
IC9211			27	4.5
1	-42.5		28	0.0
2	-41.5		29	0.0
3	-43.0		30	4.5
4	-42.9		31	8.9
5	-42.0		32	4.5
6	-42.7		33	4.5
7	-30.8		34	0.0
8	-24.1		35	4.4
Q9021			36	4.4
E	0.0		37	0.0
С	0.3		38	4.4
В	3.2		39	4.4
Q9211			40	4.4
S	-43.9		41	4.4
D	45.6		42	0.0
G	-30.9		43	4.3
Q9212			44	4.3
Е	0.0		45	0.0
С	-28.4		46	4.3
В	-43.5		47	8.9
Q9213			48	4.7
1	-44.0		49	0.0
2	-44.0		50	4.6
3	-24.0		51	0.0
4	-24.0		52	4.6
5	-28.4		53	0.0
6	-44.0		54	4.5
Q9215			55	4.5
Е	-42.1		56	0.0
С	-42.0		57	4.6
В	-41.5		58	0.0
			59	4.6
SHEETS	5]		60	0.0
MODE	DC (V)		61	0.0
PIN NO.	DC (V)	_	62	0.5
IC1211			63	4.4

U	-44.0	54	7.0
Q9215		55	4.5
E	-42.1	56	0.0
C	-42.0	57	4.6
В	-41.5	58	0.0
		59	4.6
SHEETS	51	60	0.0
MODE		61	0.0
PIN NO.	DC (V)	62	0.5
IC1211		63	4.4
1	0.0	64	4.4
2	0.0	65	0.0
3	0.3	66	4.6
4	0.0		
		67	4.6
5	0.0	68	4.6
6	6.2	69	0.0
7	4.9	70	4.4
8	8.9	71	4.4
9	1.2	72	0.0
10	0.0	73	5.0
11	0.0	74	4.6
12	0.0	75	4.6
13		76	4.6
	0.6		
14	0.0	77	0.0
15	0.0	78	4.5
16	4.2	79	4.5
17	4.1	80	0.0
			0.0
18	4.4	Q1232	
19	2.2	E	2.8
20	1.3	С	0.0
21	2.2	В	2.2
22	0.3	Q1301	
		E E	0.0
23	0.0		3.6
24	0.0	С	8.9
IC1212		В	4.3
1	3.2	Q1302	
2	3.2	E	3.7
3		C	
	0.2		8.9
4	0.0	В	4.4
5	0.5	Q1303	
6	0.5	E	3.6
7	3.2	С	8.9
		В	
8	3.2		4.3
IC1301		CN100H	
1	5.0	1 1	0
2	4.1	2	0
3	4.4	3	
4			0.3
	0.0	4	2.9
5	4.6	5	0
6	0.0	6	2.7
7	4.7	7	3.6
8	0.0	8	0.0
		_	
9	4.6	9	3.7
10	0.0	10	3.2
11	4.4	11	5.1
12	4.4	12	0
13	0.0	13	3.3
14	4.6	14	5.1
15	0.0	15	9.0
16	4.6	16	8.9
17		17	
	0.0		5.1
18	4.6	18	3.3
19	0.0	19	0
20	4.4	20	5.1
	4.4	21	3.2
21		22	3.7
21	0.0		
		23	0
22 23	0.0 4.5	23	0
22 23 24	0.0 4.5 4.4	23 24	3.7
22 23	0.0 4.5	23	0

				<power< th=""><th></th></power<>	
)	MODE PIN NO.	DC (V)		MODE PIN NO.	DC (V)
5	27	2.9		IC9211	
	28	0.3		1	-42.5
)	29	0		2	-41.5
5	30	0		3	-43.0
9	CN10AC			4	-42.9
5	1	1.1		5	-42.0
5	2	0		6	-42.7
5	3	1.2		7	-30.8
1	4	0		8	-24.1
1	5	1.4		Q9021	
)	6	0		E	0.0
1	7	0		С	0.3
1	8	0		В	3.2
1	9	0		Q9211	
1			'	S	-43.9
)				D	45.6
				G	-30.9
3				Q9212	
)				E	0.0
3				С	-28.4
9				В	-43.5
7				Q9213	
)				1	-44.0
3				2	-44.0
)				3	-24.0
3				4	-24.0
				5	-28.4
5				6	-44.0
				Q9215	
5				Е	-42.1

DUELI)]		
MODE PIN NO.	DC (V)	MODE PIN NO.	DC (V)
C9211		7	5.1
1	-42.5	8	0
2	-41.5	9	5.2
3	-43.0	10	0
4	-42.9	11	5.1
5	-42.0	12	0
6	-42.7	13	2.5
7	-30.8	CN000E	3
8	-24.1	1	3.3
Q9021		2	0
E	0.0	3	3.3
С	0.3	4	3.3
В	3.2	5	0
Q9211		6	4.3
S	-43.9	7	0
D	45.6	8	3.0
G	-30.9	9	32.3
Q9212		10	0
E	0.0	11	20.8
С	-28.4	12	0
В	-43.5	13	13.7
Q9213			
1	-44.0		
2	-44.0		
3	-24.0		
4	-24.0		
5	-28.4		
6	-44.0		
Q9215			
E	-42.1		
С	-42.0		
В	-41.5		

[SHEET7]

MODE
PIN NO. DC (V)

IC9501

1 -42.7
2 -43.3

3 4 5 IC9902 1 2 3 4 5 Q9502 E C B Q9541 E C B

E C B Q9902 E C B Q9903 E C B

E C B Q9905

E C B Q9906

E C B CN000A

-42.7 -43.3 340 -24.0

-40.5 15.0 0.0

15.6 3.6 0.0 3.3 2.4

21.2 13.9 0.0 1.3 6.7

-44.2 -28.6 -44.2

0.0 0.0 3.2

0 0 0.6

0.0 2.4 0.0

0.0 0.0 3.2

0.0 0.0 0.7

0.0 6.7 0.0

0.0 0.0 5.1

0 0 3.3 3.3

SHEETE	-1
MODE PIN NO.	DC (V)
IC9801	
1	21.2
2	9.2
3	0.0
4	9.0
5	2.5
IC9802	
1	21.2
2	5.4
3	0.0
4	5.0
5	2.5
IC9803	
1	15.7
2	5.2
3	0.0
4	4.9
5	2.1
Q9801	
E	0.0
С	0.0
В	0.6
Q9802	
Е	0.0
С	0.0
В	0.0
Q9803	
E	0.0
С	0.0
В	0.6
Q9804	
E	0.0
С	0.0
В	3.2
Q9805	
Е	0.0
С	2.1
В	0.0

<front sensor=""> [SHEET9]</front>		
MODE PIN NO.	DC (V)	
IC8752		
1	3.5	
2	5.4	
3	0.0	

MODE	[0]
PIN NO.	DC (V)
Q8701	
Е	0
С	2.4
В	0
Q8702	
E	0.0
С	0.7
В	0
Q8703	
E	0
С	0
В	0.7
CN300T	
1	3.3
2	3.3
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0

25	0.0		25	2.7	5	0	
26	4.5		26	0.2	6	0	
Ν	lo.YA	108	89				2-35

WAVEFORMS

-RECIEVER PWB-

[SHEET1]



0.9Vp-p

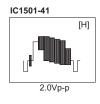
[SHEET2]







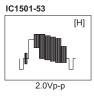


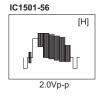






[H] 2.0Vp-p

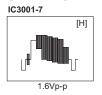




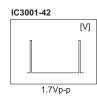


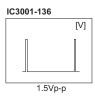
-VIDEO PWB-

[SHEET4]

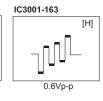
















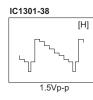


















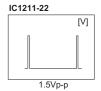












2-36 No.YA089





VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan